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THESIS

**GUIDANCE FOR THE IMPLEMENTATION OF
MARKET RESEARCH FUNDAMENTALS AT A
DEPARTMENT OF DEFENSE FIELD
CONTRACTING ACTIVITY**

by
James Andrew McCormack
December 1997

Thesis Advisor:

David V. Lamm

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**GUIDANCE FOR THE IMPLEMENTATION OF MARKET RESEARCH
FUNDAMENTALS AT A DEPARTMENT OF DEFENSE FIELD
CONTRACTING ACTIVITY**

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Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the


NAVAL POSTGRADUATE SCHOOL

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ABSTRACT

As a Federally mandated requirement, Market Research within the Federal Acquisition arena has made little progress since its inception well over a decade ago. It is the researcher's belief that the slow progress realized in the area of Market Research is in part due to Department of Defense Field Contracting Activities not really understanding how to incorporate the process into their existing routine and what skills are required of their personnel in order to effectively conduct Market Research. Furthermore, it is my belief that provided the proper guidance, or blueprint, field contracting managers will be less reluctant to incorporate a formalized Market Research process into their existing routine, and will realize greater success in doing so.

This thesis will investigate, analyze and promulgate the means by which a Department of Defense Field Contracting Activity can evolve from an organization totally absent of any Market Research capabilities, to an activity which performs effective Market Research. This research provides managers of Department of Defense Field Contracting Activities a blueprint for the implementation and maintenance of an effective Market Research process within their organizations and the metrics necessary to gauge the level of effectiveness being achieved as a result.

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I. INTRODUCTION

A. PREFACE

Acquisition Reform, the Federal procurement term of the nineties, is the result of two fundamental processes occurring simultaneously. First, "the end of the Cold War marked the continuation of a decline in most DoD appropriations accounts from the peaks of the 1980s." [Ref. 1:p. 1] "The fiscal year 1997 DoD Procurement Appropriation is \$43.8 billion, a reduction of over 67% from the \$134.3 billion (in constant fiscal year 1997 dollars) appropriated in 1985." [Ref. 2:p. 1] This fact alone illustrates that the amount of dollars the Department of Defense has to procure with is declining considerably. Secondly, aside from the end of the Cold War and the absence of a major military crisis, not many will argue that the world is a far different place than it was just a few short years ago. Things only imagined just a few short years ago are now commonplace and matters-of-fact. Specifically, technology advancements are occurring at a seemingly exponential rate. The combined effect of these two factors, a world both at peace and in motion, made the birth of Acquisition Reform inevitable. Within this reengineering revolution known as Acquisition Reform, is a process termed *Market Research*. It is this process which demonstrates great potential towards returning the purchasing power to the increasingly limited dollars being spent throughout the Department of Defense. As the United States places increasing emphasis on recapitalizing our military with the proper equipment and systems necessary to complete its multiple and varied missions, the adequacy of necessary funding to accomplish this tremendous goal will be directly linked to the Federal acquisition workforce's ability and willingness to fully

incorporate the process of market research. In brief, it is the Department of Defense's ability to gather, analyze and prudently act upon key market information which will result in best value procurements in support of imperative force modernization and continued operations.

B. RESEARCH OBJECTIVE

This study seeks to investigate, analyze and promulgate the means by which a Department of Defense Field Contracting Activity can successfully implement an effective Market Research program. The ultimate goal of this thesis is to provide managers of Department of Defense Field Contracting Activities with a blueprint for the implementation and maintenance of an effective Market Research process within their organizations. Additionally, this research seeks to provide the metrics necessary to gauge the level of effectiveness being achieved as a result of the incorporation of Market Research into the activity's daily routine.

C. RESEARCH QUESTIONS

To achieve the stated objective, the following Primary and Subsidiary questions are presented:

1. Primary Research Question

How can a Department of Defense Field Contracting Activity successfully implement an effective Market Research Program into its operational routine, given that no formal market research process exists and that available resources will remain relatively constant?

2. Subsidiary Research Questions

- A. What constitutes effective market research?
- B. What resources are necessary to conduct effective market research?
- C. What skills are necessary to conduct effective market research and what alternative approaches can be utilized to acquire these skills?
- D. What metrics could be applied to determine and measure the effectiveness of market research at a Department of Defense Field Contracting Activity?
- E. What advantages can be realized as a result of implementing an effective market research program?

D. SCOPE, LIMITATIONS AND ASSUMPTIONS

The scope of this thesis will be to provide managers of Department of Defense Field Contracting Activities a useful reference to be employed in the implementation of a structured Market Research process into their existing contracting routine. Upon completion of the reading of this thesis, the reader should be able to construct and implement an effective Market Research Program, where previously there had been none, and determine the skills and resources necessary to do so. Additionally, through the application of market research metrics, the reader, after successfully implementing a Market Research Program at their respective Field Contracting Activity, should be able to determine the level of effectiveness of the program.

The application of any recommendations and conclusions resulting from research conducted for this thesis is limited to Department of Defense Field Contracting Activities.

Although the researcher believes that many of the market research fundamentals discussed in this thesis do apply to other types of Contracting activities (i.e. Major Systems Commands), the organizational structure and the metrics used to evaluate its effectiveness are directly contingent upon the type of contracting activity performing the market research.

The underlying assumptions will be that (1) previously no formal market research process exists at the activity, and (2) the level of financial and manpower resources available to the activity will remain constant.

E. METHODOLOGY

Research for this thesis was conducted through literature searches, written survey responses and interviews. The literature searches consisted of private sector and Federal Government purchasing and acquisition manuals, applicable periodical reviews, purchasing professional association journals, the Internet, and previously published theses on Market Research and related topics. Surveys and interviews were conducted primarily with Department of Navy (DoN) Field Contracting Officers and their buying agents. The primary focus of the survey distributed to DoN field contracting activities was to ascertain the current state, if any, of the market research efforts in the field, and to solicit user recommendations on how to improve the process, without requiring additional financial or personnel resources to do so. A sample of the survey distributed is provided as Appendix A.

F. BENEFITS OF RESEARCH

The researcher believes that provided a realistic market research implementation plan,

which does not require additional funding, personnel or time, a Department of Defense Field Contracting Activity will be more apt to incorporate effective market research into its daily routine. As a result, the buying activity can achieve greater effectiveness in two fundamental areas. First, increased effectiveness in regards to the purchasing power of increasingly limited defense funds can be achieved through buying smarter, not harder. Second, increased effectiveness in the level of customer satisfaction can also be achieved by shortening procurement lead times, acquiring a better quality product and saving the customer scarce operating and procurement funds.

G. ORGANIZATION OF THE STUDY

Chapter I provides an introduction, the objective of the research, the primary and subsidiary research questions, the methods by which research data was collected, the scope, limitations and assumptions of the thesis research, the benefits of the research and organization of the study.

Chapter II introduces the statutory requirements to conduct market research, a brief description of market research and some clarification as to what market research *is not*.

Chapter III outlines the researcher's theoretical structure of the market research process, including the steps, the tools, and the skills required to perform market research. Additionally, the researcher's Principles of Market research will be introduced in this chapter.

Chapter IV provides a detailed presentation of the market research survey conducted and an analysis of the survey's results.

Chapter V provides a blueprint for the implementation of an effective market research

program into a Department of Defense Field Contracting Activity. This blueprint includes recommended actions and procedures necessary to adhere to the researcher's market research principles and metrics which can be used to determine the effectiveness of the market research program.

Chapter VI provides the researcher's conclusions and recommendations for further study on Government market research efforts.

II. BACKGROUND

A. MARKET RESEARCH: A STATUTORY REQUIREMENT

The Competition in Contracting Act (CICA) of 1984, Section 2301.(a)(5) states, "...the head of an agency shall use advance procurement planning and market research and prepare contract specifications in such a manner as is necessary to obtain full and open competition...." [Ref. 3] The underlying theme, or emphasis, behind CICA was to create a Federal acquisition environment which fostered "full and open competition." Theoretically, the mandatory use of market research was to assist in this endeavor. "The term "full and open competition", when used with respect to a contract action, means that all responsible sources are permitted to compete." [Ref. 4:p. 24]

Seven years later, in 1991, a business reengineering, or acquisition reform, philosophy was gaining support in the realm of Federal Contracting. Specifically, it was viewed that with increasingly limited dollars, combined with ever-increasing downsizing and corresponding personnel shortages, Federal Agencies needed to adapt more efficient and effective means of procuring the necessary goods and services required by each agency. Consequently, "the Section 800 panel (National Defense Authorization Act of 1991) recommended several changes in the acquisition system, one of which was to use more commercial items and to adopt business practices." [Ref. 5:p. 12] The National Defense Authorization Act of 1991 further emphasized using commercial practices, to include market research, in order to improve the acquisition process. [Ref. 5]

With the passing of the Federal Acquisition Streamlining Act (FASA) of 1994, the use of market research was reemphasized. A primary objective of this Act was to promote an attitude which directly supported the implementation and utilization of smart commercial business practices. This would reduce unnecessary duplication and administration in the Federal Acquisition process, streamlining the process, with the hope of lessening needless and counterproductive requirements previously placed upon the Federal Acquisition workforce. Specifically, [Ref. 4:p. 23]

...the goal of acquisition streamlining is to exclude requirements that do not add to the operational effectiveness and suitability of the system, or effective management of its acquisition, operation or support.

Additionally, FASA directly addresses market research in greater detail than any of its predecessor regulations, to include; [Ref. 6]

- c) Preliminary Market Research. -- (1) The head of an agency shall conduct market research appropriate to circumstances--
 - (A) before developing new specifications for a procurement by that agency; and
 - (B) before soliciting bids or proposals for a contract in excess of the simplified acquisition threshold.
- (2) The head of an agency shall use the results of market research to determine whether there are commercial items or, to the extent that commercial items suitable to meet the agency's needs are not available, nondevelopmental items other than commercial items that--
 - (A) meet the agency's requirements;
 - (B) could be modified to meet the agency's requirements; or
 - (C) could meet the agency's requirements if those requirements were modified to a reasonable extent.
- (3) In conducting market research, the head of the agency should not require potential sources to submit more than the minimum information that is necessary to make the determinations required in paragraph (2).

More specifically [Ref. 7:p. 3],

... it (FASA) requires federal executive agencies to conduct market research before developing new specifications for a procurement and before soliciting bids for proposals for a contract exceeding \$100,000. FASA also requires agencies to use market research results to determine whether commercial items/NDIs (nondevelopmental items) could meet their needs if either the item or the requirement were modified to some extent.

As recently as 7 October 1996, the Federal Acquisition Regulation (FAR) devoted Part 10 exclusively to market research. [Ref. 8] The Federal Acquisition Regulation is the primary guide to Federal procurement officials on how to legally procure goods and services for the Federal Government, and is published and maintained by the Office of Federal Procurement Policy (OFPP), with National Aeronautics and Space Administration (NASA), Department of Defense (DoD) and General Services Administration (GSA) all providing input and serving as signatories to the publication. FAR Part 10, entitled Market Research [Ref. 8];

...prescribes policies and procedures for conducting market research to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services.

The FAR further builds upon the requirements previously established and provides even more clarification about market research within the federal procurement process. Its marginal contribution to the evolution of the market research process is to identify techniques for conducting market research.

Although FAR Part 10 is exclusively devoted to the Federal Government's market research requirements, market research has been addressed in the FAR since the Competition in Contracting Act (CICA) of 1984, which created the process as a statutory requirement

within the Federal Acquisition process. FAR Part 7, Acquisition Planning, specifically addresses market research as it relates to the acquisition planning and streamlining processes.

Market research is a component of the Federal Government's Acquisition Planning process.

Acquisition planning means [Ref. 8];

...the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost.

The policy regarding the Acquisition Planning phase of the acquisition process is clearly outlined in the Federal Acquisition Regulation (FAR), which states [Ref. 8];

Agencies shall perform acquisition planning and market research for all acquisitions in order to promote and provide for--

- (1) Acquisition of commercial items or, to the extent that commercial items suitable to meet agency's needs are not available, nondevelopmental items, to the maximum extent practicable (10 U.S.C. 2377 and 41 U.S.C. 251); and
- (2) Full and open competition or, when full and open competition is not required in accordance with Part 6, to obtain competition to the maximum extent practicable, with due regard to the nature of the supplies or services to be acquired (10 U.S.C. 2301(a)(5) and 41 U.S.C. 253a(a)(1).

Additionally, in FAR Part 11, Describing Agency Needs, market research is identified as a key component within the process of describing agency needs. In fulfilling needs, agencies must promote full and open competition to the maximum extent possible and exercise caution as to not word requirements in a manner that is unduly restrictive. [Ref. 8]

As a Federally mandated requirement, market research has been around since 1984. The increasing frequency to which it is referenced in the various Federal Acquisition regulations, most notably the FAR, illustrates the corresponding increasing emphasis which

is only recently being placed upon this process. Its value added to the acquisition process is only now becoming appreciated and its continued presence as a statutory requirement is unquestionable. Simply stated, market research is vital to the Federal Acquisition process and is here to stay.

B. MARKET RESEARCH: A DEFINITION AND A DESCRIPTION OF THE PROCESS

The Federal Acquisition Regulation (FAR) Part 2, defines Market research as "...collecting and analyzing information about capabilities within the market to satisfy agency needs." [Ref. 8]

Market Research, or analysis, is more fully defined as [Ref. 9:p. 6-14];

...the process used for collecting and analyzing information about the entire market available to satisfy minimum agency needs. The results of market research are used to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services.

In layman's terms, market research is analogous to the process John Q. Public performs during the purchase of an automobile. If Mr. Public does his homework, he will greatly increase his chances of purchasing a vehicle he will be happy with for years to come, and at a price he can live with. However, if he fails to do his homework, or possibly finds himself in a situation where he doesn't have time to do the necessary research - let's say his previous car was stolen and he needs a new car now to get back and forth to work, he will most likely find himself at the mercy of the car dealers. But if Mr. Public had been reading consumer reports all along, taking time on weekends to test drive different vehicles, talked with friends and acquaintances about the satisfaction they were getting from their cars, and

had taken the time to evaluate his personal preferences and values as they relate to the purchase of an automobile (e.g. style versus economy, safety, reliability), he would be much better prepared to purchase a vehicle he wanted, and at a reasonable price.

Market research, as it relates to government researching industry, incorporates many of the fundamental processes and goals John Q. Public experiences when trying to purchase a car for himself, only on a grander scale. From this perspective,

Market Research is defined [Ref. 5:p. 8],

... as an intellectual effort on the part of a market participant to ascertain in advance, on the basis of factual information, what the response of other participants will be to an offer to buy or sell under known conditions and what their performance will be if a contract is formed.

Additionally, purchasing research, industry's term for what the Government has identified as market research, can be defined [Ref. 10];

...as a systematic investigation and fact-finding undertaking to improve purchasing performance. It includes research on purchased goods and services, vendors, and the efficiency of the company's own internal purchasing procedures.

Market research, as a process within the acquisition plan, is far more than merely identifying sources of supplies or services. During the requirements definition stage of a Federal acquisition plan, market research can assist in identifying possible alternatives for meeting mission needs. With a needs statement written in terms of essential performance and functional characteristics, the applicable market segments can be explored to determine whether sources exist that can meet them. This type of market research can also help identify industry capabilities in terms of current and emerging technologies, manufacturer's processes,

and production methods and controls. [Ref. 11]

Furthermore, aside from using market research as a means of identifying suppliers, countless other critical data may be revealed through an effective market research program. Market research can also assist in developing an overall acquisition strategy and in identifying terms, conditions and practices appropriate for the item being acquired. In fact, market research is mandatory before soliciting offers above the Simplified Acquisition Threshold (\$100,000). However, market research is discretionary for solicitations below the Simplified Acquisition Threshold (SAT). In all cases, the degree of market research efforts must be in concert with the value and complexity of the procurement. When conducted during the pre-solicitation phase, market research can be used to identify existing products, potential suppliers, product performance and quality, extent of competition in the marketplace, successful acquisition practices of others who have purchased similar items, practices of firms engaged in producing, distributing, and supporting commercial items, warranties, buyer financing, maintenance, packaging and marking, and much more. [Ref. 11]

The aforementioned type of market research is termed market investigation, and is one of two types of market research as identified by the Office of the Secretary of Defense (OSD). "Market investigation is a narrowed focus in a specific time frame of investigation in a response to help define an agency need." [Ref. 12:p. 7] It focuses on the present need, or requirement, only.

However, market surveillance, the second type of market research, is an ongoing activity. "Market surveillance is all the activities that acquisition personnel perform to keep themselves abreast of technology and product developments in their areas of expertise." [Ref.

12:p. 7] Market research is prescribed by 10 U.S.C. 2377 at two discreet stages of the acquisition process - the requirements definition and pre-solicitation phases. However, DoD activities should consider market research to be a continuing effort, and not isolated to specific acquisitions. Continuing surveillance of the marketplace can provide DoD with knowledge of any changes, advances and trends in technology and products of specific interest. "This type of data base can provide significant support to future DoD determinations regarding the use of alternative sources, industry capacity, product availability, and competitive market forces." [Ref. 11]

In summary, Government's *market research is the process by which all pertinent data necessary to the rendering of a prudent business decision, specifically regarding the acquisition of goods and/or services, can be effectively and efficiently attained, analyzed and utilized to ensure a best value acquisition is achieved.* Simply stated, it is Government, as a buyer, looking toward existing, or emerging, markets and asking, *What is out there now, or soon to be available, that best meets our requirements and provides a best value to the Federal Government and the American taxpayer?* Lastly, in order to gain the full advantages that market research has to offer, both types, market investigation and market surveillance, must be continuously employed.

C. MARKET RESEARCH: WHAT THE PROCESS IS NOT

Market research is not *marketing research*. Marketing research is a component, or subprocess, of the private sector's marketing efforts. "Marketing is the business process by which products are matched with markets and through which transfers of ownership are

effected." [Ref. 13:p. 43] "Marketing research is the systematic gathering, recording, and analyzing of data about marketing problems to facilitate decision making." [Ref. 13:p. 44]

Marketing research is a process by which industry, as the seller of goods and services, attempts to determine what the consumer wants, when they'll want it and how much they will be willing to pay for it. The ultimate goal of this effort is to maximize the company's profit and/or gain a greater share of the market in which it resides.

Industry's marketing research is the opposite, or reverse, of Government's market research. Whereas in market research, the Government is attempting to identify what already exists or is being developed in the marketplace to fill a requirement, marketing research is industry's attempt to identify what the consumer will be looking for in that marketplace.

D. SUMMARY

When acquiring goods and services for the Federal Government, market research is not just a good idea - IT'S THE LAW! This chapter identified market research as a statutory requirement, first mandated by the Competition in Contracting Act (CICA) of 1984, and then reemphasized a decade later in the Federal Acquisition Streamlining Act (FASA) of 1994. Next, a definition and description of the market research process was presented. As the term chosen for the process often leads to a misconception of the process, or confusion with the commercial process of marketing research, the researcher chose to emphasize the fact that these two processes are not the same.

III. THEORETICAL STRUCTURE OF MARKET RESEARCH

A. MARKET RESEARCH: A PROCESS TEMPLATE

Currently, no established *theory* of market research exists. However, whether expressly stated or implied in the literature, there are several fundamentals, or components, to any market research process. As with most processes aimed towards identifying a solution to a problem, there is both a logical order and a cyclical flow of the steps incorporated into this decision-making process. Specifically, in their most basic form, these steps include [Ref. 14:p. 3]:

1. Problem identification
2. Collection of pertinent data
3. Analysis of the collected data
4. Solution to the identified problem
5. Data storage for future use
6. Repeat (when a new problem arises)

In the absence of any existing theory of market research, the researcher has incorporated the aforementioned decision-making model as a template for the market research process. As a template for the market research process, the six steps of the basic decision-making model can be more narrowly defined, or modified, to include;

1. Problem identification:
 - filling a requirement (supply or service).
2. Collection of pertinent data:

- knowing what type of data to collect
 - what techniques can be employed to collect the data
 - ensuring personnel have the proper tools and skills to collect the data
 - management eliminating any barriers which may prevent the collection of the necessary data.
3. Analysis of the collected data:
- ensuring personnel possess the tools and skills necessary to effectively analyze the data collected.
4. Solution to the identified problem:
- establishing clear levels of decision-making authority.
 - empowering qualified agents to make decisions based upon their careful analysis of the data collected.
5. Data storage for future use:
- maintaining a database of data collected through market research to be used during future requirement's solution efforts.
6. Repeat:
- a new requirement needs to be filled.

1. Step One - Problem Identification

The Problem Identification step within the market research process, filling a requirement, contains two primary components: (a) the requirement's characteristics, and (b) the two phases of market research.

a. The Requirement's Characteristics

The Requirement's Characteristics component of the Problem Identification step is critical to determining the amount of time and resources to apply towards the solution to the problems. This phase of the decision-making process entails assessing the overall environment in which the problem-solving is to take place. Specifically, this phase includes consideration of the following factors;

1. Urgency
2. Characteristics and Complexity of the Item
 - What does the item have to do?
 - How well does it have to do it?
 - Where will it be used?
 - Under what conditions will it be used?
 - How often? How long?
 - Who will use it?
 - State of Art?
 - Commercial, Commercial-off-the-Shelf (COTS) or Nondevelopmental (NDI) item?
3. Estimated Dollar Value of the Item
4. Past Experience of Decision-maker

Careful consideration of all of these factors is necessary in determining the level of effort to be expended in the performance of the market research conducted for the item. For example, the degree of market research conducted on the purchase of copier paper would be

considerably less than that spent on the acquisition of a laser-guided missile.

b. *The Two Phases of Market Research*

The two phases of market research are Market Investigation and Market Surveillance. "Market investigation is a narrowed focus in a specific time frame of investigation in a response to help define an agency need." [Ref. 12:p. 7] It focuses is on the present need, or requirement, only. However, market surveillance, the second type of market research, is an ongoing activity. "Market surveillance is all the activities that acquisition personnel perform to keep themselves abreast of technology and product developments in their areas of expertise." [Ref. 12:p. 7] As parts to the first step in the market research process, both phases of market research, market investigation and market surveillance, largely determine the means by which the second step, Collection of Pertinent Data, will be approached. For example, if the decision-maker already has at their disposal the necessary information as a result of previously collected data obtained through market surveillance, then the degree to which market investigation is subsequently conducted may be shortened accordingly. Additionally, previously conducted market surveillance, as part of a continuing process, may have already obtained vital data, which now allows the researcher to further focus their market investigation efforts, thus saving time and effort.

2. *Step Two - Collection of Pertinent Data*

The second step of the market research process entails the gathering of all information necessary for the decision-maker to make an informed, prudent business decision. The perfect world analogy would be, given knowledge of all things, what would be the best decision for all parties concerned? Real world constraints of limited time, funds and

manpower dictate an approach which best balances the need to make a sound decision with the availability of limited resources. In order to achieve this, the second step must incorporate five parts to adequately collect all pertinent data required to make the most advantageous decision. The five parts to the second step of the market research process are;

- (a) the type of data to be collected.
- (b) the techniques used in collecting the market research data.
- (c) the tools, or resources, required for collection
- (d) the skills required by the collectors of the market research data.
- (e) elimination of any barriers to an effective market research process.

a. Type of Data to be Collected

The type of data sought during the data collection phase of the market research process must be focused towards the accomplishment of the primary objective, which is to make a prudent business decision in the acquisition of goods and services. Relating back to the requirement's characteristics identified earlier in this chapter, the collection of information is directly tied to the environment in which the requirement is being filled. Urgency, item characteristics and complexity, the estimated dollar value of the item and the past experience of the decision-maker all figure prominently in determining the degree and type of information necessary to make the prudent business decision. Buyers must weigh the cost of collecting data to the potential benefits to be gained as a result of the data collection.

Once the extent of data collection has been determined, the type of data to be collected must be narrowed in order to allow for efficiency and effectiveness within the collection

process. The Federal Acquisition Regulation (FAR) Part 10, Market Research, provides some basics as to the type of information to be collected during the market research process. Regarding the collection of data in support of market research, the FAR states that "the extent of market research will vary, depending on such factors as urgency, estimated dollar value, complexity and past experience." [Ref. 8]

Market research involves obtaining information specific to the item being acquired and should include whether the Government's needs can be met by items of a type customarily available in the commercial marketplace, items of a type customarily available in the commercial marketplace with modifications, or items used exclusively for governmental purposes. Furthermore, market research entails determining practices regarding customizing, modifying or tailoring items to meet customer needs and associated costs; warranty, buyer financing, discounts, etc., under which commercial sales of the products are made; the applicability of any laws and regulations unique to the item being acquired; the availability of items that contain recovered materials and items that are energy efficient; the distribution and support capabilities of potential suppliers, including alternative arrangements and cost estimates, and; the size and status of potential sources. [Ref. 8]

A cursory review of the listing provided in the FAR regarding the type of information to be collected in support of market research reveals its emphasis on commercial items, nondevelopmental items, recovered materials and energy efficiency. [Ref. 8] Although the FAR provides a solid starting point with respect to the type of data to be collected, its additional focus on identifying other statutory requirements which must simultaneously be considered, prevents the listing from becoming more comprehensive.

Identification of additional types of information to be acquired during the collection phase of the market research process is provided by Dr. Harold E. Fearon and Dr. John H. Hoagland in their doctoral research entitled "Purchasing Research in American Industry". Referring to the process they have entitled "commodity study", Dr. Fearon and Dr. Hoagland state [Ref. 15:p. 31]:

The object of such a (commodity) study is to provide information to the person actually buying that commodity which enables him to better assess his current and future purchasing actions. A commodity study requires analysis of such matters as the following:

- How the commodity is produced (different production methods).
- What are the capabilities of the vendors producing the commodity.
- Possible substitutes.
- One vendor's strategic position relative to other vendors and consumers.
- The foreign situation as it affects supply, demand, and/or price of the commodity.
- Pertinent government regulations and controls.
- Competing demands for the commodity.
- Forecasts of future usage of the commodity.
- Basis on which the prices of the commodities are established.
- Price history and explanation of significant changes.

Although their research was focused towards how private industry conducts purchasing research, Dr. Fearon's and Dr. Hoagland's listing as to what information should be sought during a "commodity" study provides additional amplification as to the type of information which may be useful in the performance of Government market research.

Furthermore, regarding the type of information to be ascertained during the data collection segment of market research, the Federal Acquisition Institute's Introduction to Contracting and The Federal Acquisition Process promulgates a listing of types of data to collect which compliments the list provided in the FAR. Specifically, it lists [Ref. 9:p. 6-14]:

- Availability of products suitable as is, or with minor modifications for meeting the need.
- Terms and conditions of warranty practices under which commercial sales of the product are made.
- Requirements of controlling laws and regulations.
- Number of sales and length of time over which they must occur to provide reasonable assurance that a particular product is reliable.
- Distribution and support capabilities of potential suppliers, including alternative arrangements and cost estimates.
- Potential cost of modifying commercial products to meet particular needs, if required.

Lastly, another training manual published by the Federal Acquisition Institute, titled Procurement Planning, provides addition information which should be collected in the performance of market research. Broken-down by source, either customers of potential suppliers or potential suppliers, the information to be collected from customers of prospective contractors includes [Ref. 9:p. 6-14]:

- how well a contractor performs;
- the reliability and quality of the product or service;
- the cost they may have paid;
- delivery terms and conditions; and

- warranty provisions

Addressing information obtainable from prospective

contractors, the reference continues [Ref. 16:p. 3-10]:

Obtaining data from prospective contractors will provide you with information you can obtain elsewhere. The actual suppliers are the only sources for determining;

- Current trends in the market place.
- Feasibility of requirement in terms of complexity and timeliness.
- If the requirement is restrictive in any way.
- Alternative solutions.
- Interchangeable parts.
- Warranty or Delivery terms.
- Amount of interest in the procurement.
- Pricing patterns.
- What commercial distribution systems are available.
- Complaints over previous procurements.

Careful review of the four lists provided on the types of data to be collected in support of market research reveals that they all bear close similarities and recurring themes, regardless of whether the list was intended for Government or private sector use. Although these lists share many specific points, the most important aspect they share is the fact they are not, and do not intend to be, all inclusive. As the volume of information available to a performer of market research can be almost limitless, it is critical, while certainly more cost effective, that the collection of pertinent data be tailored to each individual acquisition, and should be limited

only to information necessary to form an educated, prudent business decision.

b. Techniques for Collecting Market Research Data

The various techniques to be employed in the collection of market research data are contingent upon the particular phase of market research being conducted. Plainly stated, generally the techniques used during market investigation will be different from the techniques used in collecting data during the market surveillance phase.

(1) Market Investigation Techniques. The Federal Acquisition Regulation (FAR) Part 10, Market Research, expressly identifies the following techniques for conducting market research [Ref. 8]:

- (i) Contacting knowledgeable individuals in Government and industry regarding market capabilities to meet requirements.
- (ii) Reviewing the results of recent market research undertaken to meet similar or identical requirements.
- (iii) Publishing formal requests for information in appropriate technical or scientific journals or business publications.
- (iv) Querying Government databases that provide information relevant to agency acquisitions.
- (v) Participating in interactive, on-line communication among industry, acquisition personnel, and customers.
- (vi) Obtaining source lists of similar items from other contracting activities or agencies, trade associations or other sources.
- (vii) Reviewing catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.
- (viii) Conducting interchange meetings or holding presolicitation conferences to involve potential offerors early in the acquisition process.

With the exception of (v) above, the FAR listing of market research techniques concentrates on the market investigation phase of the process. Additional market investigation techniques include [Ref. 17:p. 37]:

- Investigate the market. Determine current status of technology, extent of commercial applications and source availability.
- Brief industry. Conduct widely publicized briefings on future requirements to gain interest and to solicit comments on planned approach.
- Contact potential contractors to discuss requirements and get recommendations about planned acquisitions.
- Visit potential sources. Target qualified potential sources who typically do not respond to solicitations.
- Acquire literature about commercial products, industry trends, product availability, reliability and prices.
- Analyze procurement history by examining quality and extent of competition, prices and performance results.
- Evaluate and test commercial items fully, as appropriate.
- Advertise in trade journals and other publications to solicit inquiries.
- Use the CBD (Commerce Business Daily), provide complete data and synopses far in advance of a solicitation.
- Determine why selected contractors do not respond to solicitations.
- Examine business and trade association directories.
- Use Federal Procurement Data System information.
- Examine Federal Supply Schedule.
- Contact the agency small business advisor to assist

in locating qualified small and minority suppliers.

(2) **Market Surveillance Techniques.** Although the literature supports the importance of conducting continuous market research in the form of market surveillance, there are few identified surveillance techniques. Aside from the FAR listing the technique of participating in interactive, on-line communication among industry, acquisition personnel, and customers, the only other market surveillance techniques specifically identified in the literature include [Ref. 17:p. 37]:

- Acquire literature about commercial products, industry trends, product availability, reliability, and prices.
- Attend industry and scientific conferences.
- Brief industry. Conduct widely publicized briefings on future requirements to gain interest and to solicit comments on planned approach.

c. Tools Required for Market Research Data Collection

Just as the type of information gathered during the data collection phase of market research is situationally dependent, so too are the tools to be incorporated into conducting market research. Although there are a myriad of tools available to the market researcher, only the tools applicable to the collection of data within the market research process will be discussed here.

Unfortunately, the FAR fails to identify tools to be used in the performance of any market research processes. However, in his 1996 Master's thesis, LCDR John Polowczyk constructed a comprehensive listing of tools available to the market researcher in the collection of pertinent data. His list includes [Ref. 18:p. 103]:

- Bidder's lists.
- Internal preferred suppliers lists.
- Electronic sources such as the Internet, electronic bulletin boards, or electronic commerce.
- Information from other Government agencies.
- Publications or catalogs all types.
- Other Government agencies (procurement offices, Department of Commerce, Etc.)
- Industry representatives.
- Refer to advertisement in trade journals, newspapers or other publications.
- Visits to industry facilities.

Additional tools of value in the collection of market research information are delineated in the Federal Acquisition Institute's Procurement Planning manual. These include [Ref. 16:p. 3-7]:

- Yellow Pages
- Vendor files
- Tariffs
- Trade Journals
- Commerce Business Daily (CBD) Notices
- Commercial Catalogs
- Thomas Register
- Public News Media
- Census Statistics

- Commodity Indices
- Mandatory and Optional Schedules
- GSA Federal Supply Schedules
- Basic Ordering Agreements (BOA)
- Procurement Directories
- Other federal Agencies
- Federal Procurement Data Center
- Informational requests for quotations
- Product brochures and promotional literature
- Source lists for items of a similar nature maintained at contracting activities
- Catalogs published by manufacturers, distributors and dealers
- Responses to advance notices and solicitation synopses published in the CBD
- Economic indicators
- Consumer Price Index
- Producer Price Index

In their research on purchasing research, Dr. Fearon and Dr. Hoagland also identified tools which are of use in the collection of market research data. Termed "Data Sources Used in Purchasing Research", their tools include [Ref. 15:p. 44]:

- Books on purchasing
- Consultants
- Corporate annual reports

- Other company departments
- Public libraries
- Purchasing employees in other companies
- Representatives of foreign governments
- Trade association employees
- Trade newspapers and magazines
- U.S. Government employees
- Vendor sales employees
- Vendor technicians
- Publications of:
 - Foreign governments
 - NAPA
 - Trade associations
 - United nations
 - U.S. Department of Agriculture
 - U.S. Department of Commerce
 - U.S. Department of Labor
 - U.S. Department of Interior
 - Universities
 - Vendors

As was the case with data collection techniques, strong similarities exist between the lists of market research tools created by these different organizations. Regardless of the

intended user, Government or industry, these lists closely resemble each other. Although a strong correlation exists between these listings, none of them are considered all-inclusive.

d. Skills Required for Market Research Data Collection

Extremely little can be found in the literature regarding the skills necessary to conduct market research. Polowczyk's thesis (1996) was the only reference which directly addresses the skills necessary to conduct data collection in support of the market research process. Polowczyk offers the following information collection skills [Ref. 18:p. 101]:

- Expertise in research methodologies.
- Ability to use and conduct research in any type of data base.
- Ability to formulate and ask detailed questions.
- Ability to plan a research task in order to minimize resources associated with collection of only needed information.
- Ability to read and understand material presented.
- Ability to organize and collect information into a usable medium.
- Personal Computer experience.
- Personal knowledge of product and market.
- Reading and a strong academic background.
- Customer service focus and listening skills to focus on internal customer requirements.
- Writing and other communication skills.

e. Barriers Which May Prevent the Collection of Pertinent Data

The current body of knowledge does not address the issue of potential barriers to successful collection of market research data. However, the researcher contends that

barriers do exist, specifically technical barriers, and recommended solutions to these barriers will be offered later in this thesis.

3. Step Three - Analysis of the Collected Data

The successful collecting of all pertinent data to the market research process is of no value if it can not be properly analyzed. The ability to correctly analyze the information collected also requires that the performer possess certain tools and skills. These analysis tools and skills are fundamental to the ultimate success of the market research objective, and their absence may directly result in a poor acquisition decision. Unfortunately, to date, little has been written on the subject of market research analysis tools and skills.

a. Market Research Analysis Tools

The current body of knowledge on market research analysis tools is almost nonexistent. Some examples of market research analysis tools are [Ref. 18:p. 103]:

- Personal computer.
- A spreadsheet or similar computer program.
- Create or refer to your own personal computer data base program.
- Market analysis reports from analysts such as Dun and Bradstreet.

b. Market Research Analysis Skills

The current body of knowledge on market research analysis skills is almost nonexistent, as well. Some examples of market research analysis skills are [Ref. 18:p. 101]:

- Comparative analysis
- Financial analysis
- Value analysis

- Economic analysis or forecasting
- Technical or engineering analysis
- Statistical analysis

4. Step Four - Solution to the Identified Problem

The successful solution to the previously identified problem rests almost exclusively on the first three steps of the decision-making process. Was the problem identified in Step 1 the correct problem? If care was not taken to consider the true problem, all subsequent efforts may have been working towards a solution to the wrong problem, or to only fixing a symptom of a larger problem.

Secondly, if insufficient, wrong, or inappropriate data were collected in support of a solution to the problem, then the ultimate decision may be based upon insufficient, wrong, or inappropriate information. Decisions based on such information will most probably be the wrong, or at least, not the most advantageous decision.

Thirdly, the successful collection of all the data necessary to make the correct decision, will be of little value if the market researcher does not possess the tools and skills to properly analyze the information. The market researcher must be able to analyze the information effectively in order to arrive at the optimum solution to the problem.

There are many possible solutions to any problem, including the filling of a requirement. However, if steps one through four are properly planned and executed, the arrival at the most advantageous solution to the problem becomes a greater probability.

Most importantly, once all the required steps have been completed, it is imperative

that the organization have a clearly established policy regarding who has the authority to make the decision. Typically, such policies use the dollar amount of the acquisition to determine decision authority levels. Additionally, market research personnel should be empowered, in accordance with the "Ten Guiding Principles of Acquisition Reform", to make decisions while managing - not avoiding, risk. [Ref. 8] If an individual has been properly trained and given the resources to conduct effective market research, they should subsequently be empowered, through delegation, to make the final decision regarding the acquisition.

5. Step Five - Data Storage for Future Use

The extent of time and effort involved in steps one through four, coupled with the strong probability that an identical problem, a similar item to be filled, will occur again in the future, supports the use of a data storage and retrieval system. The most common example of this type of a system are the Vendor Files maintained at all Department of Defense (DoD) Field Contracting Activities. As resources are increasingly limited, effective use of information already available greatly assists the performer of market research in arriving at an optimum solution with the least amount of new effort.

6. Step Six - Repeat

As each new problem is identified, the decision-making process will start anew.

B. MARKET RESEARCH: THE THIRTEEN PRINCIPLES

The term *theory* presumes that there are laws, or principles which must apply. Thus, a *Theoretical Structure* also must presume that there are laws, or principles, which apply to

the process for which the theoretical structure is being provided, or asserted. As current literature on Government market research, and interviews with experts [Refs. 19 and 20] in the field have been unable to identify an existing *Theory of Market Research*, the researcher has constructed thirteen preliminary *Principles of Market Research* to augment the theoretical structure previously detailed in this chapter. The following principles are offered only as a method from which to provide direction to all the efforts outlined within the aforementioned theoretical structure. Additionally, these thirteen principles will be used to establish a reference point to construct a baseline for this study and are by no means considered irrefutable or "written in stone".

The researcher's thirteen preliminary Principles of Market Research are:

1. If the performer of Market Research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective Market Research.
2. If competition as determined by market research is adequate, then more effective contracting actions will result.
3. If pre-award market research is deficient, then the contracting process could be prolonged and the possibility of a less effective contract is increased.
4. A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.
5. The ability to define the applicable market segment is fundamental to an effective market research effort.
6. The greater the amount of applicable information gathered through market research, the greater the probability that the buyer will obtain a better value through the contract action.
7. If all the factors which impact the price of a product or service are not fully understood, the probability of a less than acceptable contract is increased.

8. Effective market research necessitates the maintenance of a vehicle, or means, to keep abreast of the latest advances in technology.
9. Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources required to conduct effective market research.
10. Market research mandates the performer gain access to, maintain, and continue to improve upon the personal and personnel skills necessary to conduct effective market research.
11. Although understanding of the economic dynamics prevalent within each market segment is critical to determining the necessary market research data to be obtained and to the subsequent evaluation and analysis of these data.
12. The degree of managerial emphasis and support of market research within the Federal Acquisition process is directly related to the benefits to be realized as a result of conducting market research.
13. The degree of market research performed for a specific requirement should be in consonance with the requirement's urgency, estimated dollar value, complexity and the buyer's past experience.

These thirteen market research principles, as developed by the researcher, should be both the focus and guidelines adhered to in all Government market research efforts in order for the process to be effective and of value to the acquisition process. All actions taken in support of conducting effective market research, to include; the organizational structure designed to conduct the market research, the skills developed, the tools and resources utilized or the metrics by which the program will be measured, should continuously refer back to these principles to ensure time, effort and resources are being utilized as effectively and efficiently as possible. It is the researcher's contention that any deviation from these thirteen market research principles experienced in the designing, implementation, and execution of a market research program within a Department of Defense Field Contracting Activity, will

ultimately result in reduced efficiencies, misused resources, and ultimately ill-advised acquisition decisions.

C. SUMMARY

Market research is a process that is designed to achieve a goal. Although no formal, or official, theory of market research currently exists, the basic decision-making model can be easily modified to be used as a template for the process. The process incorporates many steps and sub-steps which must be conducted in order to achieve the goal. The successful performance of the market research process relies upon an understanding of the problem to be solved, the environment in which the problem is to be solved, the abilities of the problem-solver and the resources at the problem-solver's disposal. A careful examination of the market research process, and its individual parts, is essential to developing a strategy designed to construct, implement, execute and monitor a market research process at a field activity. Finally, all efforts undertaken to conduct effective market research could be directly related to the Principles of Market Research proposed by the researcher. Given the proper procedural steps - theoretical structure, and the proper focus - adherence to the thirteen principles, any activity should be able to construct, implement and maintain an effective market research program.

IV. THE MARKET RESEARCH SURVEY

A. GENERAL

This chapter first presents an overview of the methodology of the market research survey. The overview is then followed by a generalization of the intent, or focus, behind the survey. Next, fourteen categories of survey questions are presented, along with the specific questions asked in each category, the researcher's intent behind the questions asked in each category and an empirical representation of the responses received to each question. The empirical representation of the survey question responses consists of an objective presentation of the responses received. These include the number of responses and the proportion of the number of responses to the total number of respondents (percentage). An analysis of the survey responses directly follows the presentation of the empirical data. This chapter concludes with some preliminary conclusions made by the researcher and a summary of the important points discussed in the chapter.

B. METHODOLOGY OF THE MARKET RESEARCH SURVEY

A forty-three question survey was distributed to twelve Department of the Navy (DoN) field contracting activities. Examples of such activities include Fleet Industrial and Supply Centers (FISCs), FISC Detachments, the Navy Inventory Control Point (NAVICP), and Navy commands which maintain their own contracting departments to support command requirements. The surveyed activities participated in the market research voluntarily, with approval granted from the various Officer's-in-Charge prior to the mailing of any surveys.

Once received at each participating DoN field contracting activity, the surveys were then completed by General Schedule (GS) 1102s, 1105s, or 1106s. Although the researcher recognizes that there are distinct differences in the specific job descriptions of GS-1102s, GS-1105s and GS-1106s, the researcher hereafter will use the terms *Government Buying Agents* or *Buying Agents* interchangeably to collectively identify individuals in these series. Discussions between each Officer-in-Charge and the researcher emphasized that surveys were to be completed by only those *willing* to participate. Completion of the surveys on a strictly voluntary basis was considered crucial by the researcher toward obtaining results which most accurately reflected each participant's sincerest responses. Additionally, although the survey specifically identified only GS-1102s as the target respondents for the survey, each activity was informed that all buying agents (GS-1102s, GS-1105s and GS-1106s) were welcome to complete the survey. A total of thirty-six (36) completed surveys were returned, at an average of three (3.0) surveys per activity included in the survey.

C. INTENT OF THE MARKET RESEARCH SURVEY

The basic focus of the questions asked of the buying agents was to ascertain; a.) the level of experience and current responsibilities of each buying agent completing the survey; b.) the current status of market research efforts, as perceived by each survey participant, within their respective commands, and c.) the Government buying agent's view of these efforts and their individual approaches to conducting market research. It is the researcher's belief that evaluating the present status of market research efforts at these DoN field contracting activities was imperative to establishing a baseline upon which to build a market

research organizational model. Additionally, it is the researcher's belief that the individual views and perceptions of those most often tasked with conducting the market research, the Government buying agents within the contracting office, would provide astute insight toward the development of a plan designed to make the process more effective.

D. SURVEY CATEGORIES, QUESTIONS AND RESPONSES

The market research survey, in its entirety, is provided as Appendix A. The construction of the survey was designed to collect data in support of evaluating information from these fourteen general categories:

1. A general description of the survey respondent.
2. The respondent's general level of understanding of market research.
3. Who currently performs market research at the activity.
4. The respondent's view of who should be conducting market research at their activity.
5. The respondent's opinion of when market research should be conducted.
6. When market research is actually conducted at their activity.
7. How buying agents at the activity are currently organized and, in their opinion, the extent to which the organization supports market research.
8. Market research techniques employed.
9. Perceived activity emphasis on market research.
10. Level of resources available to support market research.
11. Existence of any Policy or Technical Barriers to conducting market research.

12. Skills possessed, personally or by the activity, which support market research.
13. Perceived value and benefits of conducting market research.
14. Existence of metrics used in measuring effectiveness of market research.

The specific questions asked in support of each category, the researcher's intent behind these questions, the empirical results of each survey question, and the researcher's analysis of the responses are provided below. It is important to note that although thirty-six surveys were returned, not all questions were answered by every respondent and some questions allowed for more than one response from each participant.

1. **Survey Demographics**

- a. *Questions and Responses*

A total of six questions were asked to determine *who* was completing the survey. This series of questions was designed to identify the experience, level of Defense Acquisition Workforce Improvement Act (DAWIA) certification and the current level of responsibility of the survey participants. The researcher's assumption is that the greater the experience, DAWIA certification level and degree of responsibility of those completing the survey, the greater the credibility and quality of the survey results. The following are the specific questions, and the responses to the questions, used to help identify the survey participant in terms of experience, DAWIA certification and level of responsibility.

Question 1: How long have you been designated as an 1102 (1105/1106)
Government Procurement Professional?

	Responses	Percentage
A. Less than 1 year?	3	8.3%
B. 1-3 years?	3	8.3%
C. 4-5 years?	0	0%
D. Greater than 5 years?	30	83.3%
Total	36	

Question 2: Do you currently possess a Government Contracting Warrant?

	Responses	Percentage
Yes	31	86%
No	5	14%
Total	36	

Question 3: If yes to question 2, what is the dollar threshold of your
warrant?

	Responses	Percentage
A. \$0 - 2,500	1	3.2%
B. \$2,501 - \$25,000	4	12.9%
C. \$25,001 - \$100,000	7	22.5%
D. \$100,001 - \$500,000	6	19.4%
E. Greater than \$500,000	15	48.4%
Total	31	

Question 4: Are you currently Defense Acquisition Workforce
Improvement Act (DAWIA) Certified?

	Responses	Percentage
Yes	36	100%
No	0	0%
Total	36	

Question 5: If yes to question 4, what is the highest DAWIA Certification Level you
currently hold?

	Responses	Percentage
A. Level I	2	5.5%
B. Level II	23	64.0%
C. Level III	11	30.5%
Total	36	

Question 6: On average, how many procurements are you responsible for at any given time? (Check appropriate boxes)

Table 1
Number of Procurements versus Dollar Level

	Below \$100,000	\$101,000 - \$500,000	Greater than \$500,000
0 - 5 Procurements	3 (8.33%)	8 (22.2%)	7 (19.4%)
6 - 10 Procurements	3 (8.33%)	7 (19.4%)	3 (8.33%)
11 - 20 Procurements	1 (2.8%)	1 (2.8%)	2 (5.6%)
21 - 50 Procurements	4 (9.5%)	2 (5.6%)	2 (5.6%)
Greater than 50	11 (30.5%)	2 (5.6%)	1 (2.8%)

Source: Developed by Researcher

b. Analysis

The results of the demographics portion of the survey clearly indicate that the majority of the respondents were experienced and well-trained buyers who held significant financial responsibility in the form of a contracting warrant. Although the level of experience and training varied somewhat, most possessed over five years of experience and held contracting warrants. Additionally, all respondents were DAWIA certified and almost 95% of these were at Level II or higher. Given these demographic characteristics, the researcher asserts that the respondents held sufficient knowledge and experience to serve as valid and insightful sources which were more than capable of providing meaningful responses on the remaining portions of the survey.

2. Level of Understanding of Market Research

a. Questions and Responses

This section of the survey was designed to determine if the participant has, and believes that they have, an adequate understanding of the survey topic: Market Research.

The following are the specific questions, and the responses to the questions, used to help identify if the participant has, and feels that they have, an adequate understanding of the

survey topic.

Question 7: What is *your* definition of Market Research?

A total of twenty-four respondents answered this question. Their definitions are provided below:

- Any contact made outside of Purchasing Branch to secure pricing, availability, standards, proprietary status, available sources, all relating to the item to be purchased.
- The accumulation of information about a product or service provided to establish availability and cost. It's a fact-finding process done for comparison and the enhancement of competition.
- Finding sources able to provide Government requirement for a product or service.
- Collecting and analyzing information available concerning capabilities to satisfy needs.
- Investigating/surveying potential suppliers by a variety of methods for interest in becoming a supplier.
- Investigating alternative sources to satisfy materiel requirements.
- Commerce Business Daily (CBD), Trade Journals, Experience.
- Actively searching for manufacturers capable of producing requirements.
- Contacting vendors in a specific industry to gather information particular to that industry.
- Systematic approach to gathering and recording information about availability, sourcing, and pricing of products and services that have potential use by the Government.
- Determination of adequacy of sources, competition, pricing and delivery. Learning facts relative to market condition that may affect ability to acquire an item.
- Market Research is the collecting and analyzing of information about the market's capability to satisfy agency needs.
- FAR Part 10 - Market Research

- Market Research is the surveying of a particular industry (usually limited to a cross-section due to the size of the industry) to determine whether commercial product/service is available to fulfill our needs. You then take a step further to determine certain industry practices unique to the particular commodity (i.e., advance payments, brokers, etc.)
- The ability to find.
- Survey of the commercial marketplace to determine industry practices and pricing.
- A tool used in order to determine if there is availability of the service/supply in the commercial world.
- A means of fact-finding to determine what a specific supply or service would cost and the availability of the item and to determine if alternate or equal items would meet the need of the Government.
- Getting information from the commercial sector in reference to what is available in the marketplace and what the fair market value is for these items.
- Gaining knowledge of sources and technology.
- To check the market for availability, delivery and price.
- Price, availability and demand.
- Surveying sources in the area of interest to obtain information about the supplies or services being procured.
- Searching the marketplace to (1) identify source, (2) identify traders and practices in the marketplace.

Question 8: Do you feel you have a sufficient understanding of what Market Research within the Federal Procurement process entails?

	Responses	Percentage
Yes	30	88.2%
No	4	11.8%
Total	34	

b. Analysis

There *appears* to be a strong correlation between the percentage of respondents who feel they have a sufficient understanding of what market research is and those that provided an adequate definition of the process. Recalling the researcher's definition from Chapter II - *market research is the process by which all pertinent data necessary to the rendering of a prudent business decision, specifically regarding the acquisition of goods and/or services, can be effectively and efficiently attained, analyzed and utilized to ensure a best value acquisition is achieved*, the definitions provided which closely approximate this definition is about ninety-percent. For instance, the definition one respondent provided which stated, "actively searching for manufacturers capable of producing requirements" is, in the researcher's estimation, a close approximation. However, "FAR Part 10 - Market Research", or "The ability to find" are considered by the researcher to be less than adequate. The fact that almost twelve percent do not feel they have an adequate understanding of what market research is closely approximates the percentage of what the researcher believes to be less-than-adequate definitions provided. Given the degree of experience, training and responsibility of the sample pool, as indicated from the responses to the demographics section of the survey, combined with the fact that the requirement to conduct market research has been around for well over a decade, the fact that more than one in ten do not understand the process is mildly unsettling.

Although approximately ninety-percent appeared to have an adequate understanding of what market research was all about, there were numerous and distinct differences among the definitions provided. Specifically, these differences resided in *the who, the how and the*

why regarding the performance of market research. Most definitions provided were ambiguous as to *who* they felt should actually be conducting the process, yet there was one definition which specifically identified those "outside of Purchasing Branch" as the individuals who should be performing the process. Interestingly, the FAR never specifically identifies who should be conducting market research.

As to the *how*, most definitions included "collecting and analyzing data", "surveying industry" or "investigating industry" as the means by which to perform the market research process. The researcher believes that these different terms are relatively interchangeable and that most respondents share a common conception as to, at least in general, how the market research process is to be performed.

Unlike *how* market research is to be performed, there were many variations as to *why* it is performed. Some felt it was to determine product or service availability, some felt it was to get the best price, others felt it was for determining availability of commercial items only and there were some that felt it was to increase competition. There were some definitions which included a combination of the above, but there were no definitions provided that listed all of these reasons. Furthermore, some additional basic reasons for conducting market research were never mentioned. For example, these included determining company practices, buyer financing, availability of warranties, related maintenance considerations, and marking and packaging factors. The researcher believes that this relatively narrow view of the reasons behind conducting market research is two-fold. First, the FAR clearly emphasizes the use of market research as a means for determining the availability of commercial items. [Ref. 8] Second, many buyers, after years of conditioning, still operate under the traditional

approach of procurement practices which emphasizes identifying and procuring the item or service that costs the least.

In summary, it does appear that roughly nine out of ten Government buying agents have an adequate, but by no means complete, understanding of the market research process.

To the researcher, this indicates a weakness in the Federal Government's ability to implement and maintain its mandatory market research element of the Federal acquisition process. Additionally, this indicates that the researcher's first principle of market research - *If the performer of Market Research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective market research*, is not being sufficiently recognized.

3. Performance of Market Research

a. Questions and Responses

This series of questions was aimed at determining if the survey participants' duties included market research, if all purchasing agents at the activity were considered responsible for conducting market research, and if others outside of contracting had a hand in the market research process. The following three questions provided information on who was performing market research efforts at the activity surveyed.

Question 9: Do you *personally* conduct Market Research on any procurements?

	Responses	Percentage
Yes	22	66.7%
No	11	33.3%
	Total 33	

Question 10: Do all 1102s conduct Market Research on their particular procurements or are there specially trained 1102s who perform the function for the entire office?

	Responses	Percentage
A. Each 1102 performs own Market Research.	28	77.7%
B. Specially trained 1102s conduct Market Research for all buyers.	1	2.7%
C. This activity has its own Market Research division.	0	0%
D. 1102s do not conduct Market Research.	3	8.3%
E. Other: <u>(See below)</u>	4	11.11%
Total	36	

Other (E.) responses included the following:

- Commerce Business Daily (CBD).
- Competition/Small and Disadvantaged Business Advocate.
- although advantageous, not all 1102s conduct market research.
- 1105s also conduct their own market research.

Question 11: Who outside contracting is involved in conducting Market Research at your activity?

	Responses	Percentage
A. Technical Personnel	15	41.6%
B. Requesting Activity	19	52.7%
C. End User	10	27.7%
D. An Outsourced agency/company	0	0%
E. Other (Specify) <u>(see below)</u>	1	2.7%
F. A combined effort between <u>(see below)</u> & __	7	19.4%
G. Nobody conducts Market Research	5	13.8%
Total	36 *	

*** (some participants had more than one response each)**

Other (E) responses included:

- Contractor support.

A combined effort between ____ & ____ (F.) responses included:

- Contract Administration and team members
- Technical personnel, requesting activity and end-user.
- Technical personnel, requesting activity, end-user and 1102s (5).

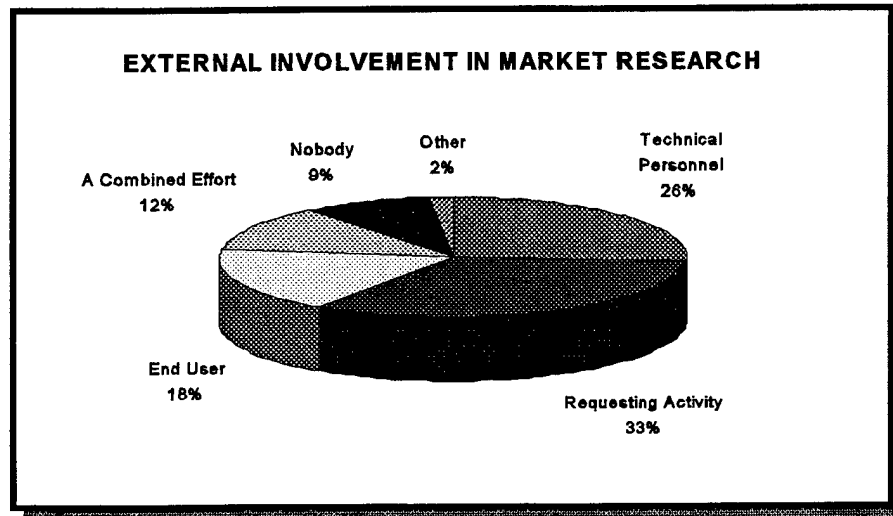


Figure 1 (Source: Developed by Researcher)

b. Analysis

The data provided in response to this section of the survey indicate that two-thirds of the buying agents personally conduct market research. The other one-third relies almost exclusively on other members of the acquisition team to perform the market research. Specifically, the buying agents who are not personally conducting market research believe that the technical personnel, the requesting activity, the end-user, or a combination of these groups are conducting market research. The distribution of those outside of contracting in which the buying agents understood to be conducting market research was fairly normal between technical (41.6%), the requesting activity (52.7%) and the end-user (27.7%). Figure 1 illustrates the buying agents' perception of who outside of contracting is involved in the market research process when they are not exclusively performing the process. Roughly twenty-percent identified market research as a combined effort between themselves (the buying agents) and others. Most alarming is the fact that approximately thirteen-percent

stated that no one was conducting market research at their activity.

The responses to this series of questions are hardly conclusive. However, the researcher believes that the responses do indicate confusion at the field level as to *who* specifically should be involved in the market research process and to what extent. FAR Part 1 states, "The Acquisition Team consists of all participants in Government acquisition, including not only representatives of the technical, supply and procurement communities, but also the customers they serve..." [Ref. 8] Insofar as market research is concerned, the researcher contends that the team concept may actually be a barrier to effective market research. It appears from the survey responses presented above that each part of the team is relying on another part to perform the process.

The researcher contends it is not so much a matter of *who* should be performing market research, but to what extent should each member of the team be involved in the process. Unless each team member contributes, the researcher's market research principles four and five can never be fully adhered to. Specifically, *A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research*, principle number four, cannot be achieved if the customer and buying agent, as well as other members of the *Acquisition Team*, are not communicating effectively. Furthermore, *The ability to define the applicable market segment is fundamental to an effective market research effort*, principle number five, also cannot be achieved unless principle number four is achieved first. Until the requirement itself is properly determined, the market segment(s) cannot be determined, either.

In summary, until the entire acquisition team synergistically participates in the market

research process by communicating effectively with one another, the researcher's market research principles four and five cannot be achieved, and therefore, effective market research cannot occur.

4. Who *Should* be Conducting Market Research

a. Questions and Responses

As stated previously, the FAR is ambiguous as to who in particular is to conduct the market research, yet emphasizes that the Acquisition Team consists of all participants in Government acquisition, including the customers they serve. Accordingly, the researcher contends that there is potential for confusion as to who should be involved in the market research process and to what extent. The following questions were chosen by the researcher to aid in determining the perception of purchasing agents as to what responsibilities they have, and feel others should have, in the market research process.

Question 12: Whether or not you specifically conduct Market Research, as an 1102, do you feel it should be your *exclusive* responsibility to conduct Market Research when appropriate?

	Responses	Percentage
Yes	10	29.4%
No	24	70.6%
Total	34	

Question 13: If no on question 12, who do you feel should be responsible for conducting Market Research?

	Responses	Percentage
A. Technical Personnel	5	15.6%
B. Requesting Activity	11	34.4%
C. End User	3	9.4%
D. An Outsourced agency/company	0	0.0%
E. Other (Specify) <u>(see below)</u>	3	9.4%
F. A combined effort between Contracting & <u>(see below)</u>	9	28.0%
G. Market Research is unnecessary in my opinion	1	3.0%
Total	32	

Other (E.) responses included:

- All involved (3)

A combined effort between Contracting & ____ (F.) responses included:

- Technical Personnel (5)
- Technical personnel and requesting activity
- Technical personnel and end-user
- Technical personnel, requesting activity, and end-user (2)
- Requesting activity (2)

b. *Analysis*

A strong correlation, or relationship, clearly exists between who is actually performing market research and who the buyers feel should be performing market research. Although only thirty percent of the respondents felt it was their exclusive responsibility to conduct market research, seventy percent felt they either shared in the responsibility or it was the responsibility of others. A significant percentage of the buying agents who did not feel it was their exclusive responsibility to conduct market research did feel they should be assisting in the process. To the researcher, there appears to be an implied belief on the part of the buying agents that the responsibility to conduct market research falls, at least in part, onto the buying agent's shoulders. The researcher believes that the buyers' feel that traditionally, insofar as procurement related actions are concerned, the customer has always "dumped" its requirements onto the contracting office and the buyers would then have to make due with what limited information they received from the customer. After all, it was their responsibility. Naturally, then, when an additional procurement related action evolves, market research in this case, there will be the tendency to pass all these additional responsibilities onto the procurement "types", as well. Right or wrong, the buyers feel that ultimately they will be held responsible for the success, or failure, for procurements they are

involved in, so they might as well play an active role in all phases, including market research, of the procurement process.

Additionally, there also appears to be an underlying belief with approximately fifteen percent of the survey respondents, that unless the FAR, or other governing regulation, specifically mentions the position responsible by name, then it must be somebody else's responsibility. The researcher considers this most noteworthy because if buyers feel they are responsible, at least in part, for the performance of market research on a *de facto* basis, they may be harboring ill feelings towards the process, which will further hinder the performance of effective market research.

The data presented in response to this series of questions further supports that confusion exists as to who should be conducting the market research process and to what extent, if any, should they be involved. As previously stated, unless the acquisition team works together, and each member of the team takes responsibility for the performance of market research, the process will fail to adhere to market research principles four and five, and, thus, it cannot be effective.

5. When Market Research Should be Conducted

a. Questions and Responses

The FAR is quite specific as to when market research is to be performed. Below the Simplified Acquisition Threshold (SAT), which is currently \$100,000.00, the FAR states market research is only necessary when adequate information is not available. [Ref. 8] The intent of FAR insofar as market research is required below the SAT is to emphasize that, although relatively small in terms of dollar value, purchases should not be made blindly. The

researcher was curious to find out what the buying agents' personal views were regarding when market research should be conducted. The researcher believes that this would provide valuable insight into the relative importance placed upon the market research process by the field buying agents. The following questions were asked to ascertain each survey participant's opinion of when market research *should* be conducted.

Question 14: In your opinion, at least some degree of Market Research should be conducted on which of the following procurements?

	Responses	Percentage
A. All procurements	11	32.4%
B. Greater than \$2,500	6	17.6%
C. Greater than \$25,000	10	29.4 %
D. Greater than \$100,000	5	14.7%
E. Greater than \$500,000	2	5.8%
Total	34	

Question 15: In your opinion, are there certain types of procurements, other than dollar value, which warrant increased Market Research efforts?

	Responses	Percentage
Yes	19	67.8%
No	9	32.2%
Total	28	

Question 16: If *yes* on question 15, specifically which types?

A total of twenty-one respondents answered this question and most provided more than one type of procurement. The types of procurements they listed, and the researcher's relevant category, are provided below:

TYPE OF PROCUREMENT

- Services (3)
- Child Care
- Commercial Services

- Sole Source (4)
- Items just broken out for competition

CATEGORY

- SERVICES

- COMPETITION

- Non-standard items
- New technology
- Research and Development
- Telecommunication (unsecured)
- Test equipment
- Hard to find items
- First time procurements (2)
- New requirements on items not recently procured.
- Information Technology
- ADP (because of changing market)
- Technical Services (to eliminate sole source buying)
- Highly technical requirements
- Cost type contracts
- Procurements involving foreign supply
- Mil-spec items (2)
- Basic commodities (such as laundry, pack and crate, janitorial, mess attendant, etc.)
- Commercial items
- products widely used in commercial world (2)
- Known heavy use, repeat need, or critical items
- COMPLEX/TECHNICAL
- CONTRACT TYPE
- FOREIGN MILITARY SALES
- SPECIFICATIONS
- COMMERCIAL

b. Analysis

There appears to be a general consensus that market research should be conducted on almost all procurements, regardless of dollar value. The categories of procurements which the respondents felt needed additional market research efforts included; services, competition, complex/technical items, contract type, Foreign Military Sales (FMS), Specification items, and commercial items. Although not an all-inclusive listing, clearly a wide spectrum of procurement categories warrant additional market research efforts, according to the buying agents surveyed. A full sixty-eight percent of the respondents believe that other

considerations, besides dollar-value thresholds, play an important part in determining if market research should be conducted. The additional considerations provided indicate to the researcher that buyers understand that market research is not conducted only to find the lowest price of a product or service. Additionally, the listing provided indicates that buying agents appreciate the fact that the market is a dynamic environment, where up-to-date information is fundamental to a sound procurement.

The list is quite comprehensive and no doubt inspired by personal experiences of the buyers surveyed. Interestingly, notably absent from the listing are customer, time/urgency, and method of procurement considerations. These may have been merely overlooked, or it may imply that the buyers do not consider these factors important toward the determination of whether or not market research should be conducted, and if so, to what extent. The researcher believes the failure to identify these particular considerations represents the buyers' "ideal world", whereas in reality, these factors must be taken into consideration.

The data provided by the responses to this series of questions support the researcher's thirteenth principle of market research, *The degree of market research performed for a specific requirement should be in consonance with the requirement's urgency, estimated dollar value, complexity and the buyer's past experience.* Although urgency is not directly addressed, the listing of additional procurements for which market research should be performed clearly contains complex items and items in which it could easily be assumed a buyer would not have much experience in procuring. For example, "highly technical requirements" implies complexity and the procurement of "Child Care" services is a fairly new phenomenon in Navy acquisition. Regarding the dollar value thresholds for which the

participants felt market research should be conducted, the degree to which market research should be conducted was not directly addressed in the survey questions, but the researcher feels it is logical to assume that the buying agents would not suggest contributing the same level of effort for a \$2,500.00 purchase as they would for a \$100,000.00 purchase, all else being equal.

6. When Market Research is Actually Conducted

a. Questions and Responses

This category of questions was designed to determine the extent of market surveillance, as opposed to market investigation, that is occurring at each field contracting activity surveyed. The researcher asked the following two questions to learn the extent of market surveillance currently being employed by each survey participant.

Question 17: Would you categorize Market Research at your activity as a continuous process which is conducted independent of a specific Purchase Request?

	Responses	Percentage
Yes	5	13.8%
No	31	86.2%
Total	36	

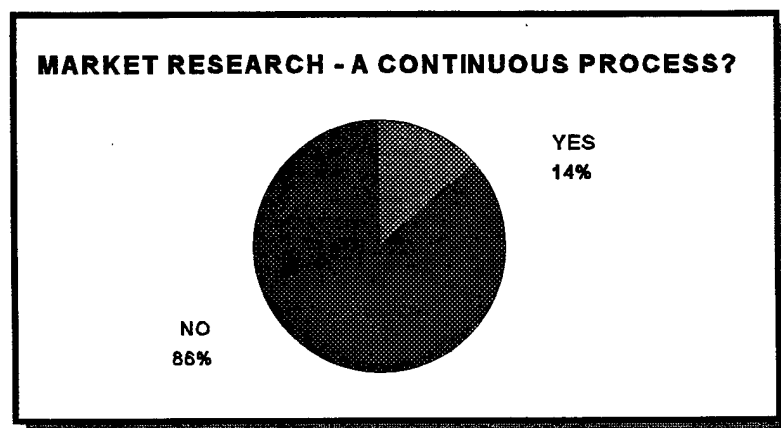


Figure 2 (Source: Developed by Researcher)

Question 18: If *no* on question 17, in your opinion, Market Research at your activity is conducted only as it applies to a particular procurement?

	Responses	Percentage
Yes	29	93.5%
No	2	6.5%
Total	31	

b. Analysis

Clearly, although the market investigation phase of market research is being conducted to some degree at all the activities surveyed, only a small percentage (13.8%) of the buyers indicate that market surveillance is being conducted at their activities. Figure 2 illustrates the buying agents' perception as to whether or not market research at their activity is a continuous process. Apparently, market research is being performed in the form of market investigation as each purchase request crosses the buyer's desk, with little, or no prior research being conducted on the procurement of the goods or services in a broader context, such as by commodity grouping or industry source.

There could be numerous reasons behind the lack of market surveillance, but the researcher believes it is the result of two factors. First, the constraints of time and manning dictate, to a certain extent, the amount of time and effort that can be used in the performance of market surveillance. Second, currently there is little understanding as to how to conduct market surveillance. It is easier to direct an investigation towards the procurement of a specific, known good or service than it is to perform surveillance on an industry as a whole. Additionally, when conducting market research in the form of investigation, the results are more immediate and tangible, thus allowing the buying agents to see the results of their efforts. Market surveillance, on the other hand, does not normally allow for the realization

of immediate benefits. However, it does require the immediate expenditure of time and resources.

Unfortunately, failure to perform continuous market research in the form of market surveillance prohibits the activity from fully adhering to principles six, seven and eleven. Market research preliminary principle six, *The greater the amount of applicable information gathered through market research, the greater the probability that the buyer will obtain a better value through the contract action*, necessitates the gathering of greater amounts of quality information to make a better purchase. Without adequate market surveillance, most likely valuable information will be lacking from the decision-making process. Additionally, because market surveillance assists in providing much of the background or underlying reasons behind such issues as pricing strategy within a particular industry or market segment, market research preliminary principle number seven will not be met. Specifically, principle seven states, *If all the factors which impact the price of a product or service are not fully understood, the probability of a less than adequate contract is increased*. Lastly, *A thorough understanding of the economic dynamics prevalent within each market segment is critical to determining the necessary market research data to be obtained and to the subsequent evaluation and analysis of these data*. Market surveillance is critical to the understanding of economic dynamics within particular market segments. Therefore, principle eleven also cannot be sufficiently applied if market surveillance is not being performed. Simply stated, as market surveillance allows the buyer to maintain a more complete basic body of knowledge regarding the market, it further enables the buyer to more quickly and accurately perform a market investigation and to more fully

understand the *fruits* of that investigation.

7. Current Organization of Buying Agents

a. Questions and Responses

Questions 19 through 21 were included to provide information to the researcher regarding the current organizational structure at the activities surveyed. Additionally, the researcher was trying to discover if the current organizational structures were considered supportive of market research efforts and, if not, what recommendations did the survey participants have to better organize in support of market research. The following questions were asked to gather the information on the organizational structure of the field contracting activities surveyed.

Question 19: Currently, the buyers within the procurement office at your activity are predominantly organized around:

	Responses	Percentage
A. Monetary thresholds (Micro, SAT, etc.)	11	34.4%
B. Types of goods/services being procured.	12	37.5%
C. Geographic region(s)	0	0%
D. Customers	8	25%
E. Type of Contract	0	0%
F. Other: <u>(See below)</u>	1	3.0%
Total	32	

Other (F.) Responses included the following:

- Combination of monetary thresholds and types of goods/services being procured.

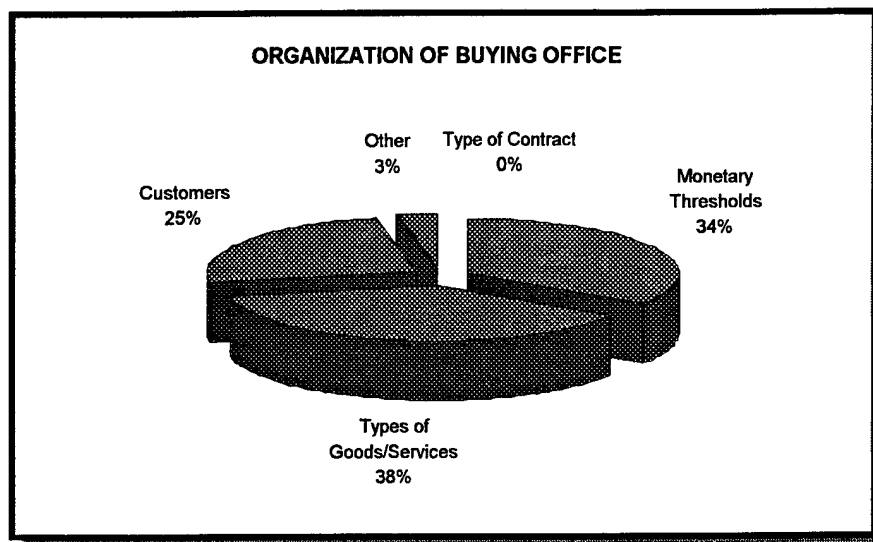


Figure 3 (Source: Developed by Researcher)

Question 20: In your opinion, the current way in which your buying office is organized facilitates the incorporation of effective Market Research into the procurement process?

	Responses	Percentage
Yes	21	60%
No	14	40%
Total	35	

Question 21: If *no* on question 20, what do you feel would be the optimum way to organize the procurement office to facilitate effective Market Research during the procurement process?

	Responses	Percentage
A. Monetary thresholds (Micro, SAT, etc.)	1	8.3%
B. Types of goods/services being procured	7	58.3%
C. Geographic region(s)	0	0.0%
D. Customers	1	8.3%
E. Type of Contract	2	16.6%
F. Other: <u>(See below)</u>	1	8.3%
Total	12*	

Other (F.) responses included:
- Not applicable (N/A)

*** 2 respondents who answered "No" on Question 20, did not provide a response to Question 21.**

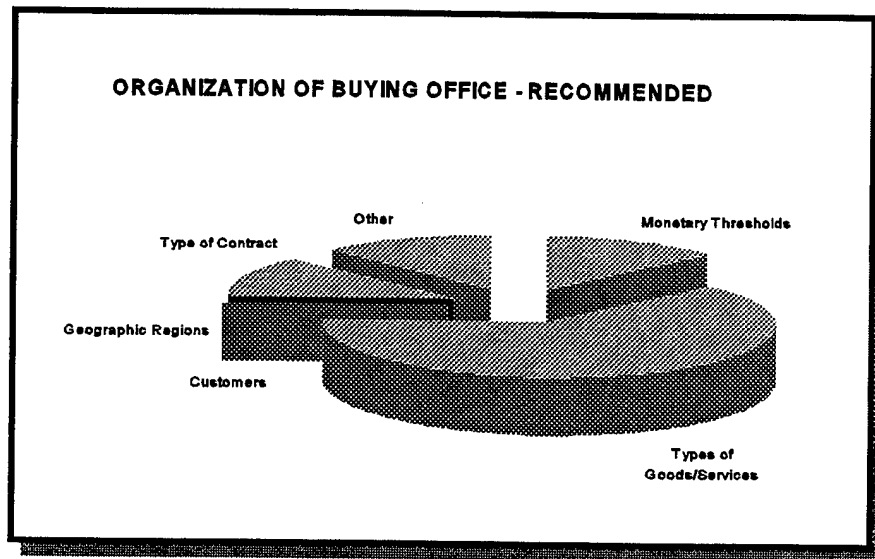


Figure 4 (Source: Developed by Researcher)

b. Analysis

The responses to this portion of the survey indicate that the buying activities represented in the survey have their buyers primarily organized around either the type of good or service being acquired (type), the dollar value of the acquisition (amount), or by the customer (requesting activity). Figure 3 represents the current manner in which buying agents are organized within their respective contracting activities. This is considered both common and logical to the researcher. However, according to a significant percentage of the respondents (forty percent), the manner in which they are currently organized is not conducive to the performance of effective market research. Figure 4 represents the buying agents' recommendations for how they should be organized within their respective activities to support effective market research. Interestingly, almost sixty percent of those who did not think their activity was currently organized in a manner conducive to the performance of market research believed that organizing around the type of good or service would be

beneficial to the performance of market research.

Market research principles four and five are directly affected by the way in which a field level contracting activity organizes its buying agents. Many factors must be taken into account in determining how to organize a field contracting activity. However, insofar as market research is concerned, the buyers' ability to become increasingly knowledgeable about the goods and services they are acquiring, as well as the markets in which these items can be found, necessitates organizing buying agents around the type of goods or services being procured. The researcher contends increased exposure, knowledge and experience regarding particular goods, services and markets can only be effectively acquired and maintained if the buyer's efforts are focused towards a limited number of goods, services and markets. This can most effectively be achieved through organization of buying agents around the type of goods and services. However, if organizing around the type of goods or services being procured is not practicable, the researcher will later offer some organizational alternatives which can also be used to perform effective market research at the field level.

8. Market Research Techniques

a. Questions and Responses

There are many techniques identified, both in the FAR and elsewhere, for conducting market research. The researcher wanted to determine which techniques were being employed with greatest frequency and which techniques were being used significantly less, or not at all. The following two questions were posed to determine the frequency of techniques being utilized by the field buying agents in performing market research.

Question 22: The top five methods you employ when conducting Market Research are (Identify as 1, 2 ... 5 respectively):

	Points	Weighted Percentage
() Contacting knowledgeable individuals in Government and industry regarding market capabilities to meet requirements.	98	19.8%
() Commerce Business Daily (CBD) announcements	89	18.0%
() Reviewing catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.	81	16.4%
() Reviewing the results of recent market research undertaken to meet similar or identical requirements.	51	10.3%
() Obtaining source lists of similar items from other contracting activities or agencies, trade associations or other sources.	48	9.7%
() Utilization of commercial services that specialize in product and source identification (Dun and Bradstreet, Thomas Register, etc.)	40	8.1%
() Querying Government data bases that provide information relevant to agency acquisitions.	28	5.6%
() Conducting interchange meetings or holding presolicitation conferences to involve potential offerors early in the acquisition process.	25	5.1%
() Participating in interactive, on-line communication among industry, acquisition personnel, and customers.	21	4.3%
() Utilization of Commercial Advocate Forum's i-Mart on-line Market Research tool.	6	1.2%
() Publishing formal requests for information in appropriate technical or scientific journals or business publications.	5	1.0%
() Other(s) (See below) _____	2	0.4%
Total Points	494	

Other responses included:

- Using our Web Site to survey industry
- Reviewing IDIQs (Indefinite Delivery, Indefinite Quantity Contracts)

Question 23: Place a check mark by each method of conducting Market Research which you *do not* routinely employ:

	Responses	* Percentage
() Utilization of Commercial Advocate Forum's I-Mart on-line Market Research tool.	22	62.8%
() Publishing formal requests for information in appropriate technical or scientific journals or business publications.	21	60.0%
() Participating in interactive, on-line communication among industry, acquisition personnel, and customers.	20	57.1%
() Conducting interchange meetings or holding presolicitation conferences to involve potential offerors early in the acquisition process.	13	37.1%
() Utilization of commercial services that specialize in product and source identification (Dun and Bradstreet, Thomas Register, etc.)	9	25.7%
() Commerce Business Daily (CBD) announcements	8	22.8%
() Reviewing the results of recent market research undertaken to meet similar or identical requirements.	6	17.1%
() Obtaining source lists of similar items from other contracting activities or agencies, trade associations or other sources.	5	14.3%
() Reviewing catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.	4	11.4%
() Querying Government data bases that provide information relevant to agency acquisitions.	3	8.6%
() Contacting knowledgeable individuals in Government and industry regarding market capabilities to meet requirements.	3	8.6%

Total Responses 114

*** More than one response was allowed. Percentage is based on proportion of responses to the total of 35 participants who provided answers to this question.**

b. Analysis

The techniques listed in this section of the survey were identified directly from FAR Part 10. [Ref. 8] The responses to which market research techniques are frequently used and which are rarely used provided valuable insight into which techniques are considered more effective than others. The data may also represent which techniques are more efficient and user-friendly. Additionally, it is important to note that different techniques may be best suited for particular situations. For example, reviewing a vendor's catalog may be sufficient for a relative simple commercial item procurement, such as for bed linen. However, this same technique may not be sufficient to obtain the necessary data for a relatively complex technical service, such as for environmental remediation services.

Because the survey questions were not specific enough to draw correlations between the use of particular techniques and why these techniques are frequently (or infrequently) used, it is difficult for the researcher to draw any firm conclusions from these data. However, the researcher feels it is fair to assume that the market research techniques most commonly used are at least reasonably effective and user-friendly, otherwise they would not experience the usage indicated by the survey responses. An example would be the use of a vendor catalog. We all utilize commercial vendor catalogs in our personal lives and would agree that there is a lot of valuable and easily obtainable information which can be acquired from these catalogs.

The techniques identified as being used the most were (1) contacting knowledgeable

individuals in Government and industry regarding market capabilities to meet requirements, (2) use of the Commerce Business Daily (CBD), and (3) reviewing catalogs and the like. The researcher believes that "contacting knowledgeable individuals..." is so broad that it can entail almost anything, therefore it is used frequently. For example, if the buyer discusses the potential purchase with the buyer adjacent to them in the office, that may be described as "contacting knowledgeable individuals...". Or if the buyer calls a vendor, or calls the customer for more information, that too can be construed as "contacting knowledgeable individuals...". All of these are helpful towards conducting market research, but do they all constitute a technique?

Second, the Commerce Business Daily (CBD) was identified as the second most frequently used market research technique. Again, a useful tool, but does placing a notice in the CBD asking if there are any sources that might be able to fill a requirement constitute an effective market research technique? No doubt it is easy to do and definitely adds value to the process (not to mention it is a requirement for procurements in excess of \$100,000).

Third, the catalog example was discussed above. Again, it is easy and valuable.

What if the top three techniques were used in concert? Would this not provide a more powerful means, or vehicle, from which to acquire valuable information in order to make a more educated procurement decision? The researcher believes so. It is analogous to viewing a box. If you view it from the bottom only, it may appear as an ordinary square, made of wood or plastic or cardboard. If you further regard its side, you may notice it is labeled, or that it is ten inches deep. Finally, if you look at it from the top, as well, you may discover it contains gold, poison, or nothing. In any case, wouldn't it be most beneficial to have as much

information as possible, or at least readily available?

The researcher's preliminary market research principle number eight states, *Effective market research necessitates the maintenance of a vehicle, or means, to keep abreast of the latest advances in technology.* The researcher asserts that these various techniques represent a portion of the vehicle, or means, necessary to stay abreast of the latest technology. However, the researcher feels that, based upon the responses provided to this series of questions, the technique, or means, or staying abreast of the market are of no value if the performers are unable, or unwilling to utilize these techniques and to realize that usually, it is a combination of market research techniques that adds the greatest value to the market research process. The graphs below (Figures 5 and 6) illustrate the market research techniques most frequently used and techniques infrequently, or least, used.

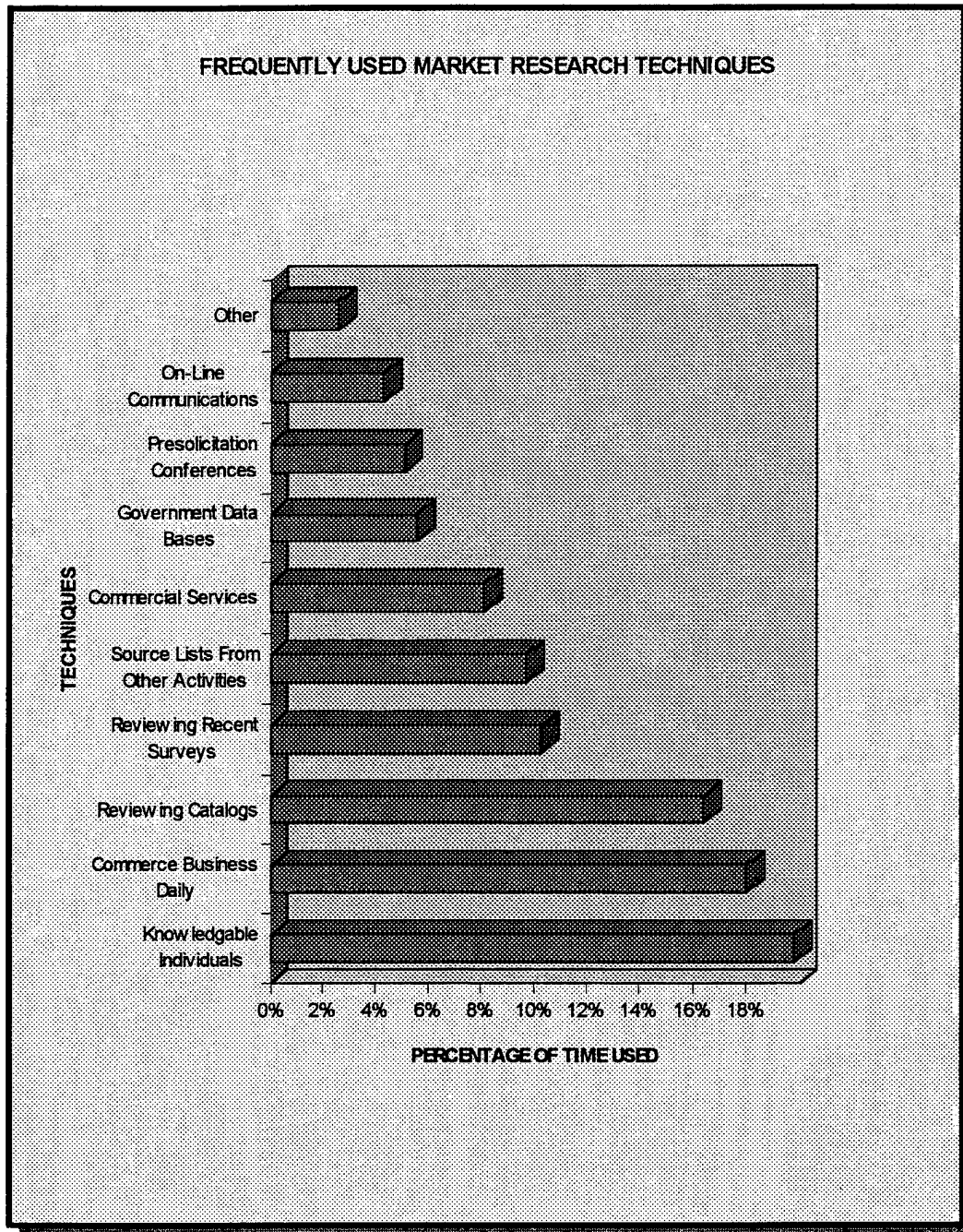


Figure 5 (Source: Developed by Researcher)

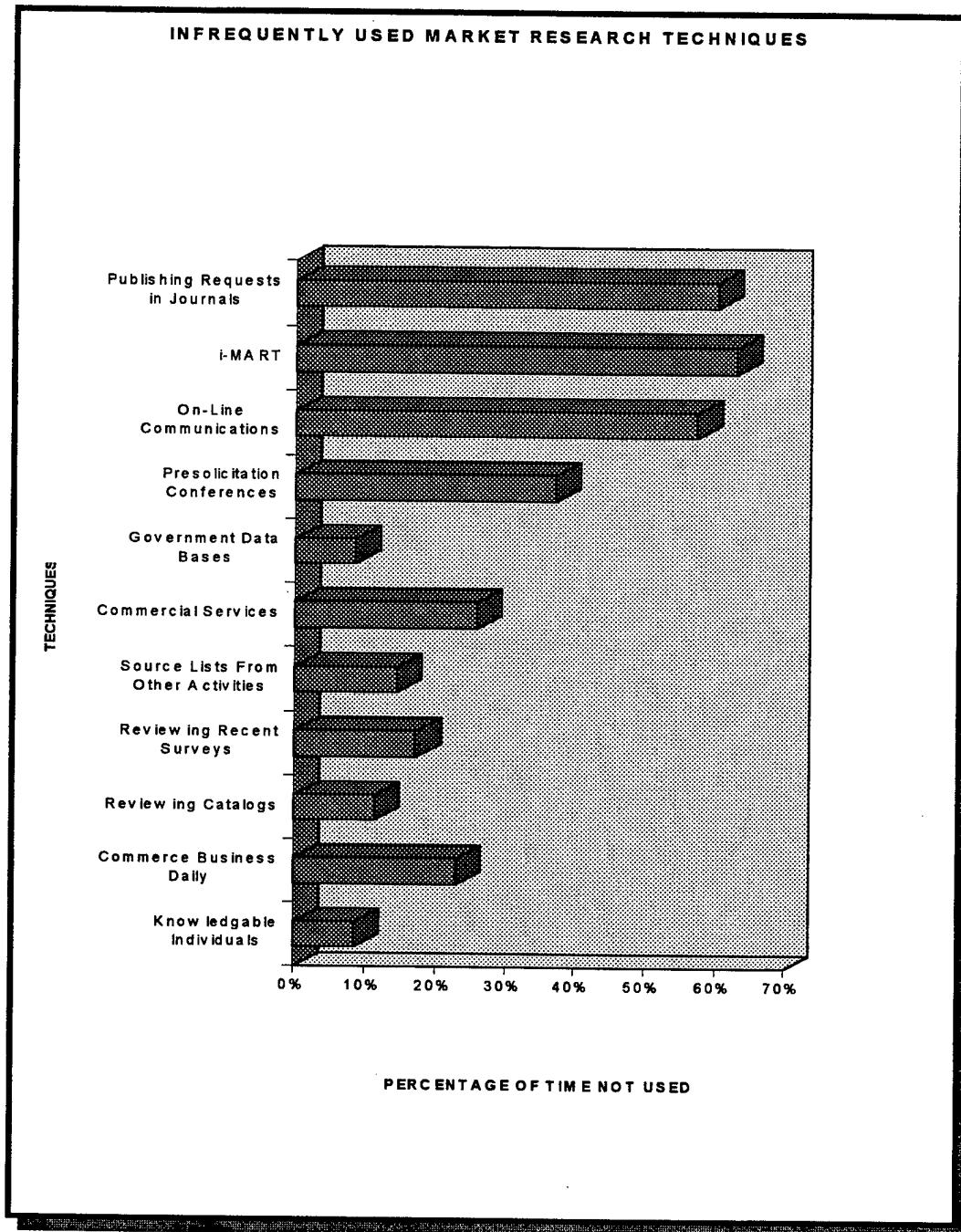


Figure 6 (Source: Developed by Researcher)

9. Emphasis on Market Research

a. Questions and Responses

The researcher was concerned that market research, like so many other Acquisition Reform initiatives, may be perceived by the experienced Federal Acquisition workforce as just another *passing fancy*. To gain insight into the relative importance placed upon the process at each activity surveyed, the following questions were asked.

Question 24: In your opinion, does your activity consider Market Research to be a fundamental component of a successful procurement process?

	Responses	Percentage
Yes	26	77.7%
No	7	22.3%
Total	33	

Question 25: How would you define *effective* Market Research?

Sixteen survey respondents answered this question. Their responses are provided below:

- Research that provides definitive information that leads to procurement of a commercial solution/product or clearly supports buying a non-commercial commodity.
- FAR Part 10 combined with real world interaction.
- Obtaining adequate competition, and obtaining the item at the right price and delivery to satisfy the end-user.
- That which furnishes useful information for an immediate procurement or provides good general information for possible future use.
- Utilizing most appropriate method for the subject procurement, resulting in the best value at the lowest price.
- A continuing surveillance of commodity markets, rather than one that is associated with one acquisition.

- Intelligent use of information gathered during market research.
- Efficient/effective use of information available to you.
- Exhausting every possible source of supply to procure an item.
- Any method that identifies at least the quality of suppliers.
- Resulting in multiple sources for the supply/service to be procured. Check all sources for commerciality of item/service.
- When the Government is able to get the product to meet their needs at a fair price.
- Allows 1102 to make determination of Sole Source/Competitive procurement, contract type or identification of sources.
- A research that defines availability of products, delivery and the prices.
- Your purchase is in the best interest of the Government and you feel a better purchase based on info on hand could not have been made.
- Competing among local/national contractors.

b. Analysis

The range of definitions provided for effective market research all indicate that the buying agents have a decent understanding of the process, yet have some difficulty fully defining the process in terms of effectiveness. Although the researcher could not locate a definition of effective market research in the literature, the researcher defines *effective market research* as the collection and analysis of relevant information which significantly improves the result of a procurement while the resources expended remain in consonance with the complexity, value, and urgency of the good or service being procured. Most definitions provided approximate this definition, some more closely than others. For example, the researcher considers, "Intelligent use of information gathered

through market research" and "Your purchase is in the best interest of the Government and you feel a better purchase , based on the info[mation] on hand, could not have been made" are two definitions which closely resemble, at least in substance, the researcher's definition of effective market research. Lastly, the researcher contends that defining effectiveness, let alone measuring it, insofar as market research is concerned, is not an easy thing to do.

Additionally, this section's responses indicate to the researcher that approximately one-quarter of the respondents felt that market research at their activity was not considered a fundamental component to the procurement process. This indicates that the researcher's preliminary market research principle number twelve is not being adhered to at a significant percentage of the field contracting activities participating in the survey. Principle twelve states, *The degree of managerial emphasis and support of the market research within the Federal Acquisition process is directly related to the benefits to be realized as a result of conducting market research.* The researcher believes that failure of management to emphasize the importance of the process will undoubtedly manifest itself in the buyer's opinion of the process, as well. This will lead to either the process not being performed at all, or performed poorly, at best.

10. Resources Available to Support Market Research

a. Question and Responses

The following series of questions were fashioned to discern the availability of adequate resources necessary to conduct market research at the field level.

Question 26: In your opinion, does your activity have sufficient personnel to conduct effective Market Research?

	Responses	Percentage
Yes	22	64.7%
No	12	35.3%
Total	34	

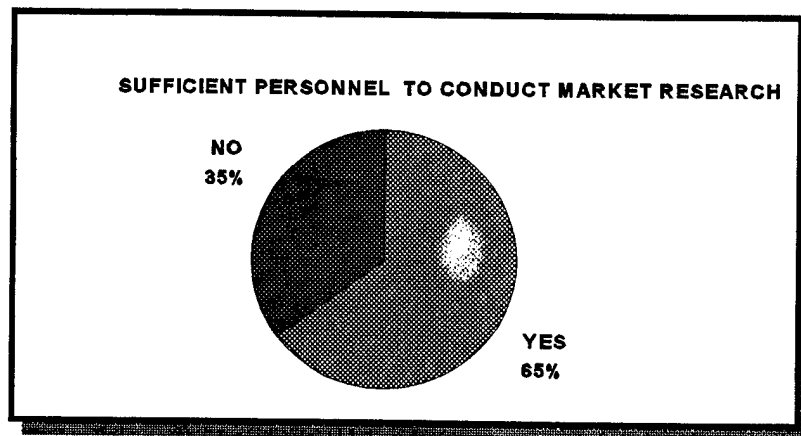


Figure 7 (Source: Developed by Researcher)

Question 27: In your opinion, does your activity have sufficient ADP equipment to conduct effective Market Research?

	Responses	Percentage
Yes	24	72.7%
No	9	27.3%
Total	33	

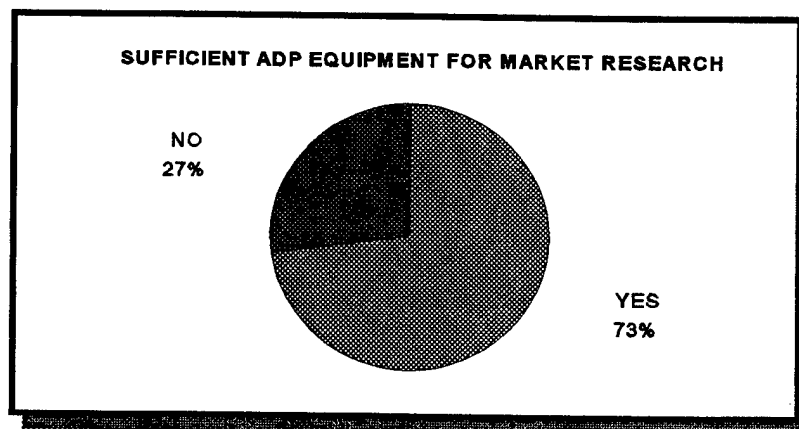


Figure 8 (Source Developed by Researcher)

Question 28: In your opinion, does your activity have sufficient phone-line access to conduct effective Market Research?

	Responses	Percentage
Yes	30	88.2%
No	4	11.8%
Total	34	

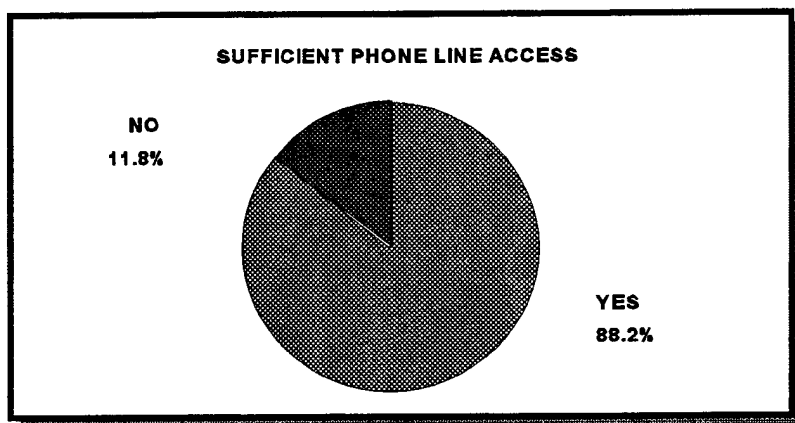


Figure 9 (Source Developed by Researcher)

Question 29: In your opinion, does your activity communicate sufficiently with other contracting activities to the extent that Market Research information is effectively shared?

	Responses	Percentage
Yes	10	28.6%
No	25	71.4%
Total	35	

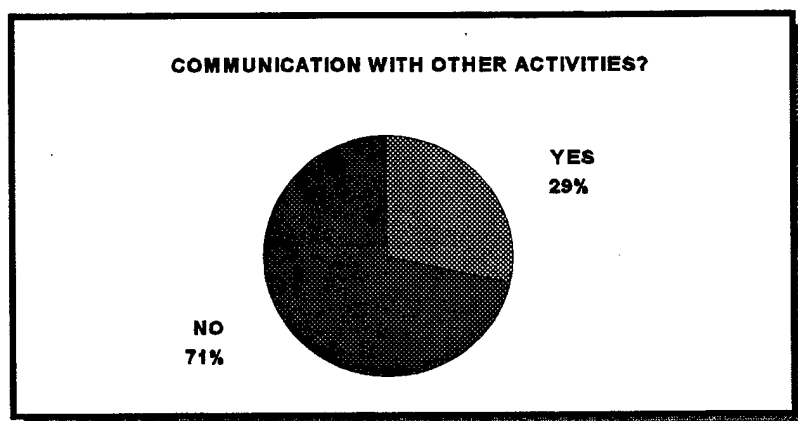


Figure 10 (Source Developed by Researcher)

b. Analysis

The level of various resources available to support market research efforts at the field contracting level appears to be less than adequate in most cases. Over one-third of the respondents felt their command did not have sufficient personnel to conduct effective market research. Additionally, over one-quarter felt they needed additional ADP equipment. Most noteworthy, over seventy-percent stated that their activities did not communicate effectively with other activities when it came to market research efforts.

In an era characterized by personnel reductions (right-sizing) and accelerated communication flow via computers and the Internet, insufficient manning coupled with insufficient ADP equipment creates tremendous barriers to the performance of most contracting activity functions, including market research. Furthermore, the field level contracting activities within DoD are not helping the situation by remaining compartmentalized and failing to share useful and current information with other activities. As a result, market research efforts are being unnecessarily repeated throughout the Department of Defense Field Contracting Activities surveyed in an environment marked by shortages of critical resources such as personnel and ADP equipment. Does this make sense?

The researcher's preliminary market research principle number nine states, *Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources necessary to conduct effective market research.* It is apparent to the researcher from the data provided in response to this series of survey questions, that principle number nine cannot be adhered to in the current environment the field contracting activities operate within.

11. Policy and Technical Barriers to Market Research

a. Question and Responses

This category of questions is critical to the successful solution to the primary research question of how to implement an effective Market Research program at a Department of Defense field contracting activity. The researcher strongly believes that despite whatever successes that may be revealed through the responses provided to the survey, if actual or perceived barriers to the market research process exist, the process will never be an effective one. In order to determine if actual or perceived policy or technical barriers currently manifest themselves in the field contracting offices represented in the survey responses, the following questions were asked of the participants.

Question 30: Are there Policy Limits at your activity which prevent you from conducting effective Market Research?

	Responses	Percentage
Yes	4	11.7%
No	30	88.3%
Total	34	

Question 31: If yes on question 30, please explain below:

Three respondents replied to this question. The following are their responses:

- In efforts to satisfy customer goals and to meet productivity requirements, market research tends to be limited.
- There is an unwritten, yet implied policy that the customer should get what he wants from whomever he wants it from.
- Some highly specialized programs require certifications and [DD]1423 specifications which must come from approved sources only.

Question 32: Are there any Technical Limits at your activity which prevent you from conducting effective Market research?

	Responses	Percentage
Yes	11	32.4%
No	23	67.6%
Total	34	

Question 33: If yes on question 32, please explain below:

A total of nine survey participants provided responses to this question. Some participants provided more than one response. Their responses were as follows:

- Availability of technical data.
- We must rely on our technical expertise available from the requesting activity.
- Technical knowledge (2).
- Computer literate (3).
- Networking.
- Not efficient or adequate use of Internet (3).

b. Analysis

Policy limits tend to be minimal and reflect the environment, both operational and political, that a field contracting activity operates within. The researcher will only note that requirements are disproportionately urgent from an operational, *real world* perspective and that, at least in some cases, rules are sometimes circumvented depending on who the customer is and the urgency of the requirement. These are, in effect, policy barriers, which must be considered, but are outside the scope of this thesis.

Technical barriers to the performance of effective market research were indicated in approximately one-third of the responses received. Three primary technical barriers were indicated in the responses: (1) the lack of technical data or expertise, (2) lack of computer and Internet skills, and (3) the absence of networking in the performance of market research. These barriers directly affect the buying agents' abilities to adequately understand what they

are buying and drastically reduces the resources available to them in determining the market's ability to meet their requirements. Lastly, again the lack of networking indicates inefficiencies in the efforts being conducted to perform adequate market research.

Given the aforementioned technical barriers to effective market research, adherence to the researcher's fourth, fifth and ninth principles (see Appendix B) is plainly jeopardized as a result of these barriers.

12. Market Research Skills

a. Questions and Responses

Questions 34 through 38 were designed to determine the individual skill levels of the survey participants, their view of the skills possessed at their activity, and those required but not yet present at their activity. Additionally, the survey asked if market research was incorporated into the activity's training program and how the participants thought market research skills might be developed. The researcher's intent was to discover if the field buying agent was satisfied that they possessed the necessary skills and, if not, how they proposed the skills be developed. The following specific market research skills-related questions were posed.

Question 34: Presently, do you feel you possess the skills necessary to conduct effective Market Research?

	Responses	Percentage
Yes	29	85.3%
No	5	14.7%
Total	34	

Question 35: Please list any personal skills you feel are necessary in order to conduct effective Market Research (e.g. knowledge of Internet and how to navigate it):

Twenty survey participants provided additional skills they felt were necessary to conduct effective market research. Most provided multiple replies to this question. The additional skills provided by the respondents and the researcher's categorization of these skills are provided below:

SPECIFIC SKILL

SKILL CATEGORY

COMMUNICATION

- Knowing where to find information.
- Telephone skills.
- Communication skills (4).

INFORMATION TECHNOLOGY

- Querying databases or other on-line sources of information (3).
- Computer skills (4).
- Internet knowledge (8).
- Know how to use the methods available for use.

SOURCE IDENTIFICATION

- Know methods available for use.
- Know people who can assist.
- Contacting experts for information.
- Knowledge of source materials (2).

PERSONAL/INTERPERSONAL

- Understanding of item to be acquired (3).
- Knowledge of the intended use and relationship to other components.
- Research skills.
- Networking.
- Organization and planning skills.
- Knowledge of Marketing (2)
- Knowledge of competition processes.
- Customer-service training.
- Good relationship with customer.
- Knowledge of what other activities are doing.
- Willingness to conduct research

Question 36: In your opinion, does your activity currently possess the skills necessary to conduct effective Market Research?

	Responses	Percentage
Yes	30	83.33%
No	6	16.67%
Total	36	

Question 37: Is Market Research addressed in your activity's Training Program?

	Responses	Percentage
Yes	18	51.4%
No	17	48.6%
Total	35	

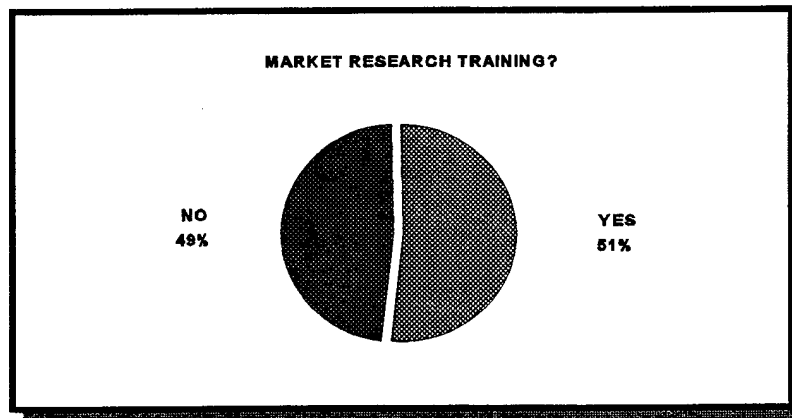


Figure 11 (Source: Developed by Researcher)

Question 38: What alternatives would you recommend as a means of developing the skills necessary to conduct effective Market Research?

	Responses	*Percentage
A. Incorporating Market Research into local Training Program.	23	67.6%
B. Complete DAWIA Certification.	13	38.2%
C. Attend a Market Research short-course (one to two days).	29	85.3%
D. Attend Trade Shows at least annually.	18	52.9%
E. Other: <u>(See below)</u>	1	2.9%

*** Participants could choose more than one response. A total of 34 respondents answered this question.**

Other (E.) responses include:

- Host trade show at activity.

b. Analysis

Responses to the questions asked regarding market research skills indicate that the participants mostly felt that they personally, and their activity as a whole, possessed the skills necessary to conduct effective market research. The comprehensive listing of skills considered necessary to conduct effective market research illustrates the tremendous range and flexibility required of the performers of this process. Additionally, this listing was categorized by the researcher into four primary groupings which the researcher felt best represented these skills. These four categories of skills identified by the survey respondents as necessary to conduct effective market research include (1) Communication Skills, (2) Information Technology Skills, (3) Source Identification Skills, and (4) Personal/Interpersonal Skills.

The researcher believes the additional skills identified by buying agents at the field contracting activities *best* represent the fundamental skills necessary to performing effective market research. Communication skills are imperative for a wide variety of reasons. First, unless all of the parties involved in the process, including the buying agents, are effectively communicating with one-another, the process will be impaired by miscommunication and subsequent failure to fully understand each other. We've all heard the expression, "A chain is only as strong as its weakest link." Failure to communicate may lead to a buyer failing to fully understand the customer's needs or failing to understand the vendor's terms and conditions. Both of these situations would inevitably lead to a less than ideal procurement.

These are but a few examples where failure to communicate either up, down or laterally within the acquisition process, particularly within the market research process, can lead to undesired results.

Information Technology (IT) skills were identified as a fundamental skill, as well. No doubt in today's world, if a buyer is not up to par insofar as certain IT skills are concerned, they will be unable to perform effectively or efficiently. A significant percentage of the information now available to a buyer in the performance of market research is available via IT related mediums such as the Internet. Inability to take advantage of these IT resources will greatly reduce the amount of information available to a buyer in the performance of market research, and will significantly delay the process, as well. Incomplete information and time delays both translate to increasing risk within the procurement process.

Source Identification, as it relates to a category of skills necessary to conduct market research, means *knowing where to go* to get the required information. It does not imply knowing all of the potential sources of supplies or services available in the marketplace. It is analogous to a Federal procurement agent and the use of the FAR. Most Federal procurement agents will not know all of the rules and regulations, but by knowing where to go in the FAR, they can readily access the necessary information from which to base a decision. This same concept holds true for a buying agent in the performance of market research. They may not know immediately all of the information necessary to make a best value source selection, or the availability of commercial items to meet the customer's needs, but by knowing where to get this vital information, they can still perform effective market research.

Lastly, Personal/Interpersonal Skills were identified as a fundamental category of skills necessary to perform effective market research. This category includes whatever skills the buyer currently possesses, or can acquire, which will add value to the process. These can include such things as understanding how economics affect the marketplace, financial and statistical analysis abilities, cost and price analysis abilities and much more. Interpersonal skills, on the other hand, include how well an individual can work with others. Does the individual inspire a strong work ethic in others, or do they tend to alienate others? Do they create trust and loyalty quickly within a newly formed relationship? Are they team players? All of these attributes and more play a vital role in a buyer being able to perform their duties, including the performance of effective market research.

Returning now to the survey, almost fifty-percent stated that their activities did not perform training on market research. Given the range and flexibility of skills necessary to perform effective market research, as indicated from the above listing, the researcher asserts that training is paramount to the strengthening and maintenance of these many skills. Lack of training on market research at the activity level indicates to the researcher that the process is not considered important, or critical to the success of a best value procurement, and that the market research being conducted is not as effective as it could be if the buying agents had been adequately trained. The researcher's tenth principle, *Market research mandates the performer gain access to, maintain, and continue to improve upon the personal and personnel skills necessary to conduct effective market research* cannot be adhered to if training is not being conducted on a regular basis. Additionally, adherence to principle twelve (see Appendix B) is also jeopardized if management fails to provide the proper emphasis and

encouragement necessary to maintain their subordinates' market research skill level.

13. Value and Benefits of Market Research

a. Questions and Responses

This section seeks to evaluate the buying agents' perception of the extent of the value added to the acquisition process as a result of conducting market research. The following questions were aimed at determining if the performers' view the process as just another administrative requirement or a bona fide and beneficial process.

Question 39: In your opinion, is the time, effort and resources used in conducting Market Research worthwhile?

	Responses	Percentage
Yes	33	94.3%
No	2	5.7%
Total	35	

Question 40: If yes on question 39, what benefits do you feel are realized through the use of effective Market Research? (More than 1 choice acceptable)

	Responses	*Percentage
A. Increased competition among suppliers	28	82.4%
B. More choices for the customer	21	61.8%
C. Increased likelihood of obtaining a better price for the Government.	27	79.4%
D. Increased leverage during negotiations with potential sources.	23	67.6%
F. Increased efficiency in being able to meet customer's needs.	17	50%
G. Better understanding of industry practices, which may lead to obtaining a best value for the customer.	21	61.8%
H. Increased value of activity to customers being supported.	15	44.1%
I. Other Benefit(s): <u>(See below)</u>	2	5.9%

*** More than one response was allowed. Percentage is based on proportion of responses to the total of 34 participants who provided answers to this question.**

Other benefits, as provided by the participants, included:

- Better product at less the cost.
- Educates the customer.
- Protest avoidance.
- Less Terminations for Default.

b. Analysis

Clearly, almost all respondents viewed market research as a worthwhile process and agreed that there were numerous benefits to be gained through the performance of effective market research. Increasing competition among suppliers, obtaining a better price for the Government, increasing leverage necessary to gain a better position at the negotiating table, and gaining a better understanding of industry practices were the benefits which topped the list. However, many additional benefits were also perceived. Educating the customer, protest avoidance and less Terminations for Convenience were all provided exclusively by the survey participants and clearly add tremendous benefits to the DoD acquisition process. Unquestionably, benefits stand to be gained through the performance of effective market research, at least as viewed by experienced buying agents at the field level.

Although none of the researcher's preliminary market research principles directly apply here, it was very encouraging to see that the buying agents did perceive the process as worthwhile and not just another acquisition *buzz-word* which does not affect them, or their duties, in the least. If those responsible for the performance of the process believe in it, then the process can flourish.

14. Market Research Metrics

a. Questions and Responses

As the concept of effectiveness is central to the research being conducted here

on market research, this category attempts to gather information which the researcher believes is necessary in order to *measure* the effectiveness of any market research efforts. The following questions were designed specifically to ascertain if any metrics are currently being employed insofar as market research is concerned and, if so, to identify these metrics.

Question 41: Do you currently apply any metrics in evaluating the effectiveness of your Market Research program?

	Responses	Percentage
Yes	2	5.9%
No	32	94.1%
Total	34	

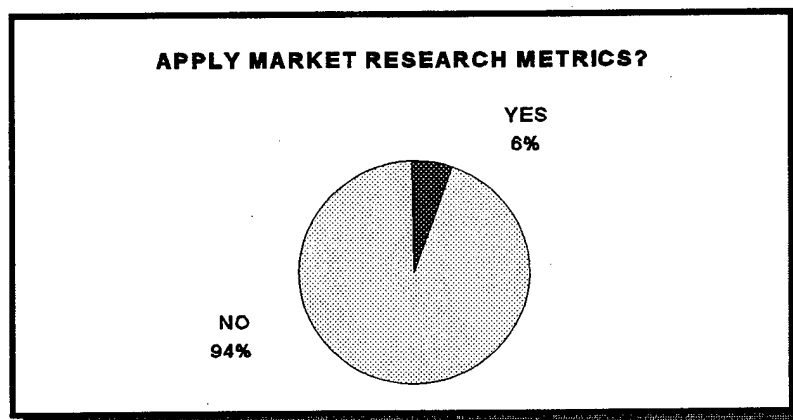


Figure 12 (Source: Developed by Researcher)

Question 42: If you answered yes to 41, are you currently employing any of the following methods for determining the effectiveness of your Market Research program?

	Responses	*Percentage
A. Number of suppliers responding to RFPs.	2	100%
B. Percentage of buys which are not Sole Source.	1	50%
C. Difference between initial proposal price and final negotiated contract price.	1	50%
D. Size of Supplier List for each commodity/service which experiences recurring demand.	1	50%
E. Other: _____	0	0%
Total	5	

*** Only two survey participants provided responses to Question 42.**

The final request for information, Question 43, was not really a question at all, but rather an opportunity for anyone to add information on market research that they felt had not been adequately addressed in the survey.

Question 43: If there is any additional information concerning Market Research at your activity which you feel would be of use in my research, please provide these comments below:

No survey participants provided any inputs to question 43.

b. Analysis

"What you measure is what you get." [Ref. 21:p. 1] Despite all the time and energy a manager of a DoD Field Contracting Activity may dedicate to the implementation and maintenance of an effective market research program, unless there are metrics by which to access the process, it would be almost impossible to determine if the time and effort were paying-off. As indicated by the survey responses, metrics are currently not being employed at the field contracting level to ascertain the effectiveness of market research being performed. Figure 12 illustrates the degree to which buying agents' feel metrics are being used at their activities to measure market research effectiveness. Additionally, respondents seem reluctant to identify any possible metrics that could be used to gauge the level of market research effectiveness.

The researcher makes two conclusions as a result of data provided from responses to the metrics questions. First, many working individuals, buying agents in this case, would naturally demonstrate an aversion to a process geared toward identifying the specific performance levels they are achieving. Even if they know they are an above average

performer, they realize the data could be used in an attempt to *squeeze* more performance out of them. Secondly, during this period in which seemingly countless acquisition reform initiatives are currently being implemented and measured, it is difficult to precisely relate successes, or failures, to any one specific process. In other words, if purchasing performance increases over the next six months, will the underlying reason be the additional market research efforts being conducted, or some other acquisition reform initiative which had recently been undertaken?

E. SUMMARY

This chapter first presented an overview of the market research survey methodology. The methodology overview was then followed by a generalization of the researcher's intent behind the market research survey. Next, fourteen categories of research questions were presented and immediately followed by the specific questions asked within each of these categories. As each question was presented, the survey's responses to these questions were included along with the researcher's reasoning behind the questions being asked. Finally, following each series of questions, an attempt was made by the researcher to analyze the results of the survey questions. Analysis of the data received in response to the questions lead the researcher to some preliminary conclusions regarding the strengths and weaknesses of market research as currently executed in DoD Field Contracting Activities. These strengths and weaknesses are also related to the applicable preliminary principles developed by the researcher. Table 2 below presents these comparisons.

MARKET RESEARCH STRENGTHS AND WEAKNESSES	
STRENGTHS:	PRINCIPLE(S):
1. DAWIA Certifications are a priority at the Field Contracting level.	<p>9. Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources required to conduct effective market research.</p> <p>12. The degree of managerial emphasis and support of market research within the Federal Acquisition process is directly related to the benefits to be realized as a result of conducting market research.</p> <p>10. Market research mandates the performer gain access to, maintain, and continue to improve upon the personal and personnel skills necessary to conduct effective market research.</p>
2. There is sufficient awareness of the requirement and process from which to begin building an effective program.	1. If the performer of market research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective market research.
3. Most buying agents feel market research is a worthwhile process which can yield many benefits.	1. If the performer of market research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective market research.
WEAKNESSES:	
1. Buying Agents at the field level do not <i>fully</i> understand market research.	1. If the performer of market research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective market research.
2. Market research is <i>not a continuous process</i> at the field contracting level.	<p>6. The greater the amount of applicable information gathered through market research, the greater the probability that the buyer will obtain a better value through the contract action.</p> <p>7. If all the factors which impact the price of a product or service are not fully understood, the probability of a less than acceptable contract is increased.</p> <p>11. A thorough understanding of the economic dynamics prevalent within each market segment is critical to determining the necessary market research data to be obtained and to the subsequent evaluation and analysis of these data.</p>

Table 2 (Page 1 of 2) Source: Developed by Researcher

MARKET RESEARCH STRENGTHS AND WEAKNESSES	
WEAKNESSES (cont):	PRINCIPLE(S):
3. DoD Field Level Contracting Activities are generally <i>not organized</i> in a manner conducive to the performance of market research.	<p>4. A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.</p> <p>5. The ability to define the applicable market segment is fundamental to an effective market research effort.</p>
4. Not all buying agents are currently performing market research.	<p>4. A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.</p> <p>5. The ability to define the applicable market segment is fundamental to an effective market research effort.</p>
5. <i>Little to no communication</i> exists between DoD Field Level Contracting activities insofar as market research efforts are concerned.	<p>9. Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources required to conduct effective market research.</p>
6. Some <i>technical barriers do exist</i> which prevent the performance of effective market research.	<p>4. A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.</p> <p>5. The ability to define the applicable market segment is fundamental to an effective market research effort.</p> <p>9. Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources required to conduct effective market research.</p>
7. Market research <i>training is not being conducted</i> at the DoD Field Contracting level.	<p>10. Market research mandates the performer gain access to, maintain, and continue to improve upon the personal and personnel skills necessary to conduct effective market research.</p>
8. Market research is <i>not highly emphasized</i> at DoD Field Contracting Activities.	<p>12. The degree of managerial emphasis and support of market research within the Federal Acquisition process is directly related to the benefits to be realized as a result of conducting market research.</p>
9. Currently, <i>no metrics exist</i> at DoD Field Contracting Activities to measure the effectiveness of market research at the activity.	<p>2. If competition as determined by market research is adequate, then more effective contracting actions will result.</p> <p>3. If pre-award market research is deficient, then the contracting process could be prolonged and the possibility of a less effective contract is increased.</p>

Table 2 (Page 2 of 2) Source: Developed by Researcher

V. IMPLEMENTATION OF EFFECTIVE MARKET RESEARCH

A. OVERVIEW

The manager of a Department of Defense (DoD) Field Contracting Activity should now be well aware of what market research is, what the process entails - including its phases and subprocesses, the potential benefits realized as a result of its performance, and the statutory requirement to conduct it. Given the current strengths and weaknesses of the market research process at the field contracting activity level (see Table 2), the field contracting manager's challenge is to develop an implementation strategy which accentuates the positive while mitigating or eliminating the negative, in order that his/her activity will be able to conduct the process effectively and realize numerous benefits as a result. Specifically, "How can a Department of Defense Field Contracting Activity successfully integrate an effective Market Research program into its operational routine, given that no formal Market Research process currently exists and that available resources will remain constant?", the researcher's primary research question, must now be considered. This chapter will begin by individually addressing each market research principle developed by the researcher along with the researcher's recommended actions to ensure adherence to these principles at the Field Contracting level. Specifically, these recommended actions will encompass those required by management and those actions required by the buying agents at the activity. The actions recommended for management will entail market research program implementation and maintenance concerns. The actions recommended for the buying agents will be aimed toward the actual performance of the process within their established procurement process. The

market research principles will be introduced and discussed sequentially during the portion of the chapter dealing with management and buying agent recommendations. Once this section is complete, each component will be placed into a model in order to further illustrate the manner in which these parts contribute to the whole market research program. Two separate models will be developed, one for the *Managerial Structure of Market Research* (Figure 13) and another for *The Buying Agent's Market Research Process* (Figure 14). The chapter will conclude with a summary of the key issues addressed during the chapter.

B. ADHERENCE TO PRINCIPLES - RECOMMENDATIONS

1. Market Research Principle No. 1

If the performer of Market Research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective Market Research.

a. Management

In order to ensure compliance with the first principle of market research, management must ensure a quality training program is ongoing and includes market research.

Like any process critical to the success of any given procurement, market research skills, techniques, statutory requirements and lessons learned are dynamic and constantly evolving. In order to ensure each buying agent at the activity has the requisite knowledge, skills and experience to conduct effective market research, the manager must ensure that initial market research fundamentals training is provided to each buyer and that periodic, refresher training is also included in the activity's training program. The initial market

research training can be provided to the buying agents through several different, no-cost-to-the-activity alternatives. The most comprehensive (to date) market research training aid is the Welcome to Market Research - A Tutorial guide prepared by the Navy Acquisition Reform Office (WWW.ACQ-REF.NAVY.MIL). This guide is broken down into five modules and is quite comprehensive. Another source from which to establish a base level of knowledge for market research is Chapter III of this thesis. Chapter III was designed to provide a rudimentary, yet detailed description of the various stages of the market research process, and includes tools, skills, and techniques used in the performance of the process. Additionally, the Federal Acquisition Institute (FAI) also publishes a handbook entitled Procurement Planning, in which Chapter 3 exclusively deals with market research. The Federal Acquisition Institute is also available on the World Wide Web. Lastly, the researcher recommends a recently completed on-line Market Research course sponsored by the Federal Acquisition Institute and the General Services Administration. The course is free and details are provided by accessing the *Training* icon on the Defense Acquisition University's Homepage.

b. Buying Agents

Adherence to Principle number one on the part of the buying agents includes developing the personal knowledge of the process and skills necessary to conduct effective market research.

The buying agent should expect that the manager will establish and maintain an effective training program which includes market research training. However, the buyer must also take the personal initiative to acquire the necessary training to become proficient at

market research. There are several very effective and user-friendly methods of acquiring and developing market research expertise. A few examples include sources available on-line, teaming with fellow buying agents, and establishing an informal inter-activity market research "pen pal" relationship.

Very recently, several on-line market research training aids have become available and are easy to access and free. Provided the activity has access to the World Wide Web (WWW) these resources can be obtained within minutes. As previously mentioned, the most comprehensive (to date) market research reference is the Welcome to Market Research - A Tutorial guide prepared by the Navy Acquisition Reform Office (WWW.ACQ-REF.NAVY.MIL). The Federal Acquisition Institute (FAI) also publishes a handbook entitled Procurement Planning, in which Chapter 3 exclusively deals with market research. Additionally, the researcher recommends a recently completed on-line Market Research course sponsored by the Federal Acquisition Institute and the General Services Administration. The course is free and details are provided by accessing the *Training* icon on the Defense Acquisition University's Homepage. Lastly, numerous training resources, to include market research, can be accessed through the Office of the Deputy Under Secretary of Defense (Acquisition Reform) at www.acq.osd.mil/ar/.

Teaming with colleagues at the office can be a productive and enjoyable method of acquiring market research know-how. Chances are, some buyers at the activity already have a fairly sound grasp of the market research process and they can assist in relaying their knowledge to other buyers. In return, buyers who are more adept in other procurement areas can share their knowledge. This method of cross-training will improve each individual's

market research expertise, fosters an *esprit de corps* mentality and increases the productivity of the activity. Through the teaming arrangement, market research skills and experience can be continuously improved through the sharing of lessons learned regarding the process. People like to share experiences, especially challenges that they were able to successfully overcome. By sharing market research lessons learned, other buyers at the activity can gain by one another's individual experiences.

The inter-activity buyer "pen pal" concept was developed by the researcher as a derivative means of building upon the internal teaming arrangement created to facilitate cross-training at the activity. Through periodic communication or correspondence with a "pen pal" at another activity, the buyers can share their personal market research experiences and gain from their counterpart's experiences. Naturally, this concept is not limited to market research, but market research lends itself well to this program because market conditions and customer requirements are immensely dynamic. Through this "broadened" teaming arrangement, a buyer can now benefit from even more individual market research experiences of others. Furthermore, the ease and inexpensive nature of electronic communications, specifically e-mail, make this program an easy one to implement.

2. Market Research Principle No. 2

If competition as determined by market research is adequate, then more effective contracting actions will result.

a. Management

Principle number two holds that provided the proper input to, and performance of, the process, and given that the proper market conditions exist, market research will

directly contribute to tangible, measurable benefits. Granted , there will be instances where no matter how much market research is conducted, the results may still not be favorable to the Government. For example, market research efforts determine that no commercial item can be located to meet the requirement and only one source appears capable of designing and building the item. However, most of the time, if market research is conducted properly, multiple sources can be identified that are capable of satisfying the Government's requirement. Subsequently, if adequate competition exists, market forces will contribute towards a procurement that will be fair and reasonable and in the Government's best interest. The results of adequate competition, as determined by effective market research include, but are not limited to: higher quality products, quicker delivery, reduced cost to the Government, satisfied customers, contractor protest avoidance and less Terminations for Default.

Each of these possible beneficial outcomes that may result from effective market research are measurable and metrics can be created and implemented to determine the effectiveness of the activity's market research efforts. "It is imperative to have some measures, or metrics, for comparison of the old process (baseline) with the new process (acquisition reform)." [Ref. 22:p. 189] However, prior to implementing the following recommended metrics, the manager must ensure an established baseline exists from which to measure any variances.

As the contracting activity is usually not the owner, or user, of the goods or services being provided, in order to determine if higher quality products are being attained as a result of market research efforts, the manager of the activity must gather this information through its customers. A typical means of accomplishing this is through a customer survey. Bearing

in mind that responses to written-type surveys may not always achieve the attention desired, a more effective means of gathering customer satisfaction information is to call, or e-mail, the customer and ask them specifically how they feel about product X or service Y. In addition to obtaining valuable information on the product that can be used to aid in future market research efforts, this method also demonstrates to the customer that the buying agents are sincerely interested in meeting their needs. The customer-buying agent relationship will also improve as a result. Measuring customer satisfaction regarding specific products or services, and properly documenting it, is a valid metric which can be implemented to measure the success of market research efforts.

Another potential benefit of effective market research is quicker response, or delivery time of the product or service to the customer. This, too, is a measurable outcome which can have metrics applied to it to gauge its success. The Procurement Administrative Lead Time (PALT) is the time it takes from receipt of the purchase request to the time the contract is actually formed. All the data necessary to measure PALT is held in-house, making PALT an easily measurable metric. The researcher believes applying PALT as a metric can be used to ascertain the effectiveness of market surveillance. If the buyers at the contracting activity are performing effective market surveillance, then the time required to perform market research upon receipt of the purchase request should be reduced. Reduction in the activity's average PALT, while maintaining, or improving upon, the customer's level of satisfaction, is a valid measure of an effective market research program and should be incorporated as a metric.

The Procurement Lead Time (PLT) is another valid indicator of effective market research which should be used as a metric. PLT measures the time it takes the customer to

actually receive the good or service, once they have provided the contracting activity with the purchase request. Thus, PLT is a truer indicator of the combined responsiveness of the contracting activity and the supplier. Assuming the contracting activity is responsive, as measured by PALT, the time it takes the supplier to deliver, once the contract is cut, is a very useful indicator as to the supplier's responsiveness to the Government's needs. If the customer complains a lot about late deliveries whenever a certain supplier receives the award, the buying agents should make note of these complaints. This type of information is critical to the determination of a supplier's past performance, which must be taken into consideration when conducting market research. The actual metric of measuring PALT does require thorough and frequent communication between the buying agents and their customers.

The proportion of procurements performed under the requirements of FAR Part 12 in relation to total procurements performed by the activity over the same period of time, is also a sound metric in determining the effectiveness of the activity's market research program. As FAR Part 12 relates directly to the procurement of commercial items, a market research effort must have been performed in support of that commerciality determination, if in excess of the Simplified Acquisition Threshold (SAT). "Agencies shall--Conduct market research to determine whether commercial items or nondevelopmental items are available that could meet the agency's requirements." [Ref. 8] As the use of provisions under FAR Part 12 are tied directly to the use of market research, the proportional increase, or decrease, in the use of FAR Part 12 in relation to total procurements will measure a corresponding increase, or decrease, in the use and effectiveness of market research.

In addition to measuring the number of commercial item contracts against the total

number of contracts, the proportion of commercial item *dollars* obligated to *total dollars* obligated is a metric which can be implemented to gauge market research effectiveness.

An extremely rudimentary, yet useful, means of evaluating market research at the activity is to survey the buyers themselves. The manager should periodically ask the buyers their opinions on the use and effectiveness of market research at the activity. If, over time, the views of the buying agents as to the effectiveness of market research do not appear to be improving, the manager must then try to determine why this is so and what can be done to improve market research efforts at the activity. An informal audit of the market research process can be performed very easily by the manager and can yield some valuable insights into what is really occurring at their activity.

Another advertised, and easily measurable, benefit of market research is that it may reduce the number of sole source procurements being made by an activity. Increased information, through market research, may naturally lead to identification of additional items and/or suppliers that can meet the customer's needs. Logically, as a result of an effective market research program, the number of sole source procurements should decline.

Determining the average number of responses per solicitation is another market research metric. Increasing the average number of responses per solicitation indicates that the buying activity is reaching more potential offerors or goods and services, which increases competition and provides a better value, and more alternatives, to the customer as a result.

Increased competition through additional source, or item, identification, along with its corresponding reduction in sole source procurements, will lead to better prices to the Government. Thus, reduction of the average cost or price per contract is another measurable

indicator as to the effectiveness of market research. This, too, is a metric which requires very little time and effort to determine.

As an educated buyer is a more powerful buyer, a meaningful market research metric is the variance between the original proposal offer and the final negotiated contract price. A buyer who fully understands the components of applicable cost and pricing data, the extent of competition in the applicable market segment, and the position or interests of the offerors, is much more capable at arriving at a fair and reasonable contract. Correspondingly, if proper market research is performed, the buying agent will not be taken *advantage* of, and they will be able to arrive at a fairer, usually lower, contract price. This metric is one of the most telling market research metrics, but may also be one of the more difficult to track. The researcher believes it is well worth the manager's time and effort to gather the information necessary to calculate this metric.

The proportion of Firm Fixed-Price or Fixed-Price with Economic Price Adjustment type contracts can also be used to gauge the effectiveness of market research. These type contracts are used in the acquisition of commercial items and may indicate increased market research effectiveness.

Finally, the reduction in Terminations for Default and Bid Protests are key indicators as to the effectiveness of the activity's market research program. These are easily measurable and can provide some valuable insight into the activity's market research effectiveness.

b. Buying Agents

As Principle No. 2 relates to output, the actions of the buying agents, as with management, although they all contribute to its achievement indirectly, are not directly

addressed concerning their adherence to the principle. Principle No. 2 states that, given the proper input to the process - addressed in Principles One, Four and Twelve (see Appendix B), the proper performance of market research - addressed in Principles Three, Five, Seven - Eleven and Thirteen (see Appendix B), and the proper market conditions, certain tangible benefits may result. These benefits, while the purpose of their achievement was to benefit the customer, also benefit the buying agent as an individual. The researcher believes success in the performance of their duties, through effective market research in this case, leads to happier, more productive buying agents. "Success breeds success." This self-perpetuating phenomenon builds upon the buyer's confidence in their abilities and their perceived value to the organization. Ultimately, as the buying agent enjoys greater success through effective market research, they create happier customers, obtain increased knowledge and experience which can be used to improve upon future buys and achieve an increased sense of self-gratification.

3. Market Research Principle No. 3

If pre-award market research is deficient, then the contracting process could be prolonged and the possibility of a less effective contract is increased.

a. Management

Pre-award market research at a DoD field contracting activity consists primarily of market investigation. [Ref. 23:p. 5]

This [market] research should be conducted as soon as possible after the requirement has been defined to provide sufficient time for identifying standard commercial practices, analyzing available and alternative terms and conditions, and negotiating an appropriate business arrangement with the agency.

The manager's responsibilities here include establishing market research as a priority within the activity and creating the proper environment in which to perform the process.

The performance of market research must be included the job descriptions, or task requirements, of the activity's buying agents. It should be perfectly clear to the buying agents that the market research phase of a procurement is not just a good idea, it fundamental to the success of a procurement which is in the best interest of the Government. While market research is a statutory requirement in most instances, management must convey to the buyers that the process should not be approached as just another "check the block" exercise to ensure they are in accordance with the FAR. Rather, management's responsibility is to convey the value-added aspect of the process and fully endorse market research as a critically important and worthwhile process. The survey conducted by the researcher indicates most buying agents already consider market research to be a worthwhile process, thus this task should not be too difficult for management.

The second responsibility of a manager towards ensuring adherence to Principle No. 3 is to make sure the environment has all the essential elements required to conduct effective market research. Specifically, these include a visible emphasis on the process by management, the facilitation of skills acquisition and development, sufficient tools and resources and the empowering of buyers to make their own decisions and be responsible for their actions. Each of these are addressed directly in the recommendations to adhere to other market research principles, but the manager must be cognizant that the process output, an effective contract in a timely manner, is directly related to the process input, which is ultimately the responsibility of the manager.

b. *Buying Agents*

As the performers of the process, buying agents must also serve as the *grass roots representatives* of the process. As they participate in the process frequently, they are best equipped to determine where various strengths and weaknesses exist in the performance of the function. As the "eyes and ears" of the field contracting manager, it is the buying agent's responsibility to notify the manager of actions required to continuously improve upon the market research process within the activity. The buying agent is best qualified, for example, to inform the manager of the contracting activity, that there isn't enough available access to the Internet in order to conduct effective market research. Or if a buyer finds themselves in a situation where they are conducting research in an unfamiliar industry and they, and their colleagues don't understand all the applicable terms and conditions, they must raise their need for additional training to the activity's manager.

Buyers must take a hands-on approach to continuous improvement of the market research process. If they can not rectify weaknesses personally, or facilitate the fix at their level, it is their responsibility to make the issue known to the manager in order that it be resolved. The desired output of an effective contract in a timely manner is directly contingent upon not only the manager's input into the process, but the efficiency and effectiveness of the process itself. The researcher believes strongly that buying agents share an equal responsibility in the level of efficiency and effectiveness which can be attained through continuous process improvement, which ultimately requires buyers to provide vital feedback to the manager.

4. Market Research Principle No. 4

A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.

a. Management

Thorough knowledge of the customer's requirement is critical to the market research process. The only way to ensure the buyer fully understands the customer's requirement is through effective communication. Management must ensure that the buyers understand that management places great emphasis on continuous and thorough communications with the customer. This can be accomplished through the activity's mission statement or guiding principles. It can also be accomplished through direct dialogue between the manager and the buyers and it can be addressed in the activity's training program. Additionally, management can facilitate greater communication between the activity's buyers and its customers by encouraging Partnering and the use of Integrated Product Teams (IPTs). Use of Partnering and IPTs on a modified basis, as detailed below in the Buying Agent's recommended actions, can result in tremendous advantages regarding the full understanding of the requirement by all members of the procurement team.

b. Buying Agents

Adherence to Principle No. 4 on the part of the buying agents includes taking a proactive approach towards participating in open communication with the customers and technical personnel.

The buying agent at the Field Contracting activity must regard the customer and technical personnel as partners, or team members, in the procurement process. Much

emphasis recently regarding acquisition reform initiatives has included the increased use of *Partnering* and the corresponding creation of *Integrated Product Teams (IPTs)*. The researcher believes that a modified, or scaled-down version of a partnering arrangement that incorporates agency members only, can be highly useful in the procurement process, especially where market research is concerned. While Partnering and IPTs normally include industry members from corporations the Government is currently contracting with, an internal and simplified Partnering arrangement consisting of the customer, technical personnel and the buying agent can greatly increase the likelihood of a successful procurement. As the procurement expert, the buying agent must serve as the catalyst in this teaming arrangement and make the process as user-friendly as possible for other members of the team. In Ralph C. Nash Jr.'s article, Training the Contracting Officer of the Future, he states, "...in my ideal world the CO [Contracting Officer] would come to the acquisition planning meeting with a full understanding of the market...while the technical people come to the table with full knowledge of the needs of the agency." [Ref. 24:p. 16] The implication is that market research is a required skill of the Contracting Officer(CO), and, by extension, of the buying agents, but that skill alone will not suffice if the CO does not truly understand the requirement which needs to be met. Nash continues, "...the CO as a member of an IPT is the most important contribution of the Guiding Principles." [Ref. 24:p. 16] Again, by extension, the buying agent as a member of an IPT can facilitate the exchange of vital communication between themselves, the customer and technical personnel in order to arrive at a complete and uniform understanding of the requirement which needs to be met. Only then, can a buying agent begin to perform effective market research. After all, it is difficult to find answers when

you don't even know the question.

5. Market Research Principle No. 5

The ability to define the applicable market segment is fundamental to an effective market research effort.

a. Management

This principle relates to the efficiency of the *process* portion of market research. Primarily, management's greatest contributions to an effective market research program relate to the *input* portion of the market research model. However, as the performers of the process, the buying agents are the direct responsibility of the manager. Accordingly, to ensure adherence to Principle No. 5, the manager has an obligation to ensure the buyers can effectively define the applicable market segment in the performance of market research. The researcher believes the manager has two methods available to provide market segment definition skills to his/her buying agents. These are training and experience. As these are discussed in detail under principles 1, 7 and 11 (see Appendix B), they will not be elaborated upon here. However, the manager of a DoD field contracting activity must understand that the ability to narrow a market segment in order to conduct more efficient market research is a difficult skill to acquire and will take time to achieve.

b. Buying Agents

This principle implies that if the performer can narrow the search, they will be more efficient as a result. Specifically, if a buying agent knows where to look, it will take less time to gather the data necessary to reach the optimal procurement decision. Subsequently, if time is saved in the gathering of the data, more time and effort can be allocated towards

analysis of the data. Furthermore, if the total time is reduced as a result of being able to reduce the *search area*, additional time can be spent on other functions the buying agent is constantly involved in, such as customer service, contract documentation, etc.. However, in order for a buying agent to be able to define the applicable market segment, they must be trained and gain experience.

Training and gaining experience, as they relate to defining a market segment in the performance of market research, are often one in the same. Unless the buying agent is attending college level courses in business, which the researcher strongly encourages, the acquiring of this skill will be acquired at work while on the job. This skill can be described as a learn-as-you-go type skill. Until a buyer actually attempts the process, it will be difficult to fully grasp. However, after numerous *trials and errors*, the average buying agent can become quite adept at the narrowing of a market segment based solely on the requirement provide by the customer.

Buying agents must understand that they are usually not alone in the process, as others have gone before them and succeeded. The buying agent should solicit the assistance of fellow buyers, industry, the customer and commercial and small business advocates in their attempts to narrow their search. Don't "reinvent the wheel" if others have performed similar searches in the past. Additionally, keep in mind, if the other aspects of an effective market research program have been successfully implemented, then the activity should be retaining valuable documentation which can assist in narrowing the market segment, as well.

6. Market Research Principle No. 6

The greater the amount of applicable information gathered through market research, the greater the probability that the buyer will obtain a better value through the contract action.

a. Management

This principle also relates to the efficiency of the *process* portion of market research. Primarily, as stated under Principle No. 5, management's greatest contributions to an effective market research program relate to the *input* portion of the market research model. However, as the performers of the process, the buying agents are the direct responsibility of the manager. Accordingly, to ensure adherence to Principle No. 6, as with Principle No. 5, the manager has an obligation to ensure the buyers can effectively gather all the information necessary in order to arrive at a decision which is in the best interest of the Government.

The researcher believes the manager must incorporate three means of ensuring the buying agents can gather all the data necessary when conducting market research. These are creating an environment conducive to effective market research, providing training, and providing the necessary resources. As these are discussed in detail under Principles 1, 7, 9 and 12 (see Appendix B), they will not be elaborated upon here. However, the manager of a DoD field contracting activity must understand that it is the gathering of all applicable information which is the most critical aspect of an effective market research effort. If a decision is reached on only part of the information, the likelihood that the decision will be an undesirable one is greatly increased. The manager of a DoD field contracting activity must

ensure that there are no barriers to the gathering of information in support of market research!

b. Buying Agents

Market research is all about gathering data to make a best procurement decision. The greater the amount of relevant data, the more informed a buying agent becomes, which theoretically increases their chances of making a more educated, correct decision.

The purchase of an automobile by an individual provides a good analogy. If the consumer does not research the dealer's invoice cost and negotiates a deal based exclusively on the Manufacturer's Suggested Retail Price (MSRP), the consumer would have been making a decision on incomplete data. The dealer may have marked-up the price fifty-percent over cost. Now let's imagine the same customer did some research and obtained the dealer's invoice cost price. That same individual is now better equipped to negotiate a deal more favorable than before. Taken one step further, let's imagine the same consumer is now an experienced car buyer and knows that most car manufacturers include *hold backs* into the cost they actually charge the dealerships, which lessens the actual cost of the vehicle to the dealer. A holdback is a discount off of the stated invoice cost, and is usually invisible to the consumer. Thus, the dealer is already clearing the two to three percent holdback provided by the manufacturer even if they sell the car at *invoice* cost. This example demonstrates that by increasing the amount of relevant data collected during market research, the better prepared a buyer will be when establishing contract terms with the supplier.

To be prepared, a buying agent must continuously seek training and vigilantly monitor the climate and resources applicable to the performance of effective market research. If the

buyer feels ill-prepared, they should seek out the skills or notify their superiors of any current barriers they feel are preventing them from performing effective market research.

7. Market Research Principle No. 7

If all the factors which impact the price of a product or service are not fully understood, the probability of a less than acceptable contract is increased.

a. Management

The manager of a DoD field contracting activity is probably already well aware of the fact that industry utilizes many different pricing strategies when determining the price to which it is willing to sell an item or service. However, managers often overlook the fact that the buying agents at the activity, especially the more experienced ones, have been conditioned to believe the only legitimate pricing strategy is one which is *cost-based*. Now that there has been an increased emphasis placed upon the acquisition of commercial items and services, where applicable, the manager must ensure buying agents at the activity develop a more complete understanding of the numerous pricing strategies of industry. If a manager of a field contracting activity is to ensure adherence to Principle No.7, they must facilitate a paradigm shift within the core of buying agents regarding pricing strategies and provide training to the buyers regarding the various methods employed by industry.

b. Buying Agents

Market research Principle No. 7 requires buying agents to rethink some of the most fundamental tenets of contract pricing, specifically that fair and reasonable usually equate to a *cost-based* pricing strategy. As Federal acquisition reform initiatives place increasing emphasis on the use of commercial items and practices, buying agents must gain

a thorough understanding of the many pricing strategies employed by industry, as often times these strategies may not be cost-based, yet may still be considered fair and reasonable within their respective market segments.

"In pricing products, sellers use two basic approaches." [Ref. 25:p. I-7] These are *cost-based* pricing strategies and *market-based* pricing strategies. Most buyers are already familiar with the cost-based pricing approaches. These include mark-up pricing, margin on direct cost and rate of return pricing. The various market-based strategies include profit-maximizing pricing, market-share pricing, market skimming, promotional pricing and market-competition pricing. In order to acquire further understanding of these various market-based strategies, the researcher strongly encourages they read the Contract Pricing Reference Guide Volume I - Price Analysis, prepared by the Air Force Institute of technology (AFIT) and the Federal Acquisition Institute (FAI). This free publication provides valuable insight into the various commercially driven pricing strategies which must now be mastered in order for a buying agent to be proficient at market research and the procurement process as a whole.

8. Market Research Principle No. 8

Effective market research necessitates the maintenance of a vehicle, or means, to keep abreast of the latest advances in technology.

a. Management

In order to ensure compliance with the eighth principle of market research, management must ensure that the market research training program includes educating the buying agents on when and how to use appropriate techniques and that management allows buyers to periodically take advantage of *unique* market research opportunities when they

arise.

As the necessity for management to ensure a quality training program, which includes market research, has previously been emphasized, the researcher will not discuss it again here in great detail. However, management must be aware that market research is not a "one size fits all" type process. The manager must also realize that although the extent of market research is contingent upon factors such as price and complexity, there are numerous market research techniques in which the usage is contingent upon various factors. For example, if a buyer is attempting to identify potential Small Businesses or Minority Businesses, they might use the PASS and the PROFILE databases to acquire the information. "PASS is a database of small business firms wishing to do business with the Federal Government. PROFILE is a database of minority business firms interested in Federal Government contracts. Product and service listings are available. " [Ref. 17:p. 37] While it is true that *some* market research techniques are appropriate to all buys, for example synopsisizing in the Commerce Business Daily or reviewing the activity's vendor files, some techniques are not necessarily appropriate for certain procurements. For example, it is inappropriate to spend time and money visiting potential sources of supplies for routine commercial of-the-shelf type items (COTS). However, if the item is non-routine, and may require advanced technology, site visits may be appropriate. Often times a combination of techniques may be appropriate. In all cases, management should be aware that different techniques are available, their use is contingent upon the specific procurement circumstances or conditions and management should allow buyers, once sufficiently trained, to use their business judgment in determining the appropriate method. Lastly, and most importantly, management should support the

buying agent's decisions regarding the technique of market research chosen.

Allowing buying agents to periodically take advantage of unique market research opportunities, especially regarding market surveillance, is also critical to an effective market research program. A prime example would be to have buying agents attend industry and trade conferences, or scientific conferences, which may be disseminating new product technologies or other useful information. Additionally, agencies, or the Federal Government as a whole, often hold conferences which, especially in this era of Acquisition Reform, may include Market Research or other information relevant to market research. If held locally, these conferences can be free or of little expense to the activity. The researcher recommends that occasionally the manager of a DoD field contracting activity commit some funds to send qualified and deserving buying agents to conferences that may not be in the area. Although funding is increasingly in short supply, the dividends would be significant. The professional training acquired not only helps the individual, but they can pass the knowledge onto their fellow associates. Obviously, the activity itself gains from the increased efficiency and effectiveness of the buyers as a result.

Another not-so-unique, but often disregarded, market research technique that managers should consider is to allow vendor representatives to discuss their latest product lines with buying agents at the activity. A common business practice, this method allows for the transfer of vital and up-to-date market information with little effort, and no cost, to the activity. This method does, however, require careful management attention in regards to planning and ethical issues. The care in planning is to ensure sales representatives are only allowed into the office at times prearranged by the buyers and not on an impromptu basis.

Unscheduled visits are counterproductive and should be avoided. However, scheduled appointments, for a specified period of time, to discuss relevant product information, can be extremely beneficial towards keeping the buying agent abreast of the latest products that may be available to meet customer's requirements. From an ethical perspective, the manager must take great care to ensure the requirements of the Procurement Integrity Act (PIA) of 1986 are not violated when agents are meeting with vendor representatives. For example, the standard PIA restrictions against seeking future employment, soliciting or accepting gratuities, and disclosing source selection or proprietary information must be emphasized and monitored. Also, care must be taken to ensure the buying agents maintain an *arm's length* relationship with the vendors and do not become *unduly familiar*. Furthermore, the manager must be aware that even the perception of ethical improprieties can cause problems relating to workforce production and possible supplier complaints.

b. Buying Agents

The means, or vehicle, which allows the buying agent to keep abreast of the latest advances in technology consist of those techniques specifically relating to market surveillance. Specifically, these methods include, but are not limited to, the following (1) reviewing literature on commercial products, industry trends, product availability, reliability and prices, (2) attending industry, trade, and scientific conferences, (3) brief industry on future requirements and solicit comments on a planned approach, and (4) meeting with sales representatives to discuss their latest product lines and potential applications to customer needs. The aforementioned techniques of market surveillance allow the buying agent to maintain current knowledge that can be utilized in rendering a prudent procurement decision

more quickly when a customer's needs arise. By maintaining a basic level of knowledge, less time and effort should be required to complete the market analysis and make an educated decision. For example, if a buying agent, through market surveillance, is already aware that computer modems can now achieve 56,000 bauds per second (bps), then they will be better able to decide between two computers, one which is offering only 28,000 bps and the other at 56,000 bps. The current rate of technological advancement now mandates that a buyer keep abreast of the *latest and greatest* if they are to make a best value procurement decision. As the need to perform market surveillance is not perceived as urgent or tangible as the performance of market investigation, there may be a tendency on the part of the buying agent to dismiss it, or to procrastinate performance. The researcher strongly believes that buyers should consider market surveillance in the framework or *a little effort now, will save a lot of effort later.*

9. Market Research Principle No. 9

Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools/resources required to conduct effective market research.

a. Management

In order to ensure compliance with the ninth principle of market research, management must assume the role of *provider* - ensuring the buying agents within the command have the necessary tools and resources at their disposal to conduct effective market research. Contrary to popular belief, most of the tools required to conduct market research are already available, or should be, at the field contracting activity. Additionally, those they

may not already possess, can be acquired at little or no expense to the activity.

In most cases, market research makes additional use of existing resources. For example, most field contracting activities should already have at their disposal such tools as Bidder's Lists, Commercial Catalogs, General Services Administration (GSA) Schedules, and Past Performance Files. These all represent tangible, hard copy documentation which all provide valuable information to the market research process. Additionally, access to the Internet, the Commercial Advocates Forum's i-MART (Internet Market Research Tool), the Commerce Business Daily (CBD), Customers, End-users and other Government Activities all represent resources easily incorporated into any market research effort.

At little, or in some cases, no expense to the activity, the numerous other tools are available and can be used in the performance of market research. These include, attending Trade Shows, accessing the Thomas Register [of American Corporations], visiting Industry facilities, and meeting with industry representatives/salespersons.

b. Buying Agents

Buyers need to be aware that there are a myriad of market research tools already at their disposal within their respective activities. Some tools are easier to use than others, yet all are tools that can be mastered with a modest investment of time and energy. Most importantly, using these tools can be fun. Avoid cutting and pasting from previous procurements of a similar nature and take the time to do it right. After all, you have the tools necessary, all it takes now is a little training and the desire.

10. Market Research Principle No. 10

Market research mandates the performer gain access to, maintain, and continue to improve upon the personal and personnel skills necessary to conduct effective market research.

a. Management

Research conducted in support of this thesis indicates that while generally speaking, education and training the procurement workforce appears to be a priority at the field contracting level, training specifically relating to market research is deficient. While Defense Acquisition Workforce Improvement Act (DAWIA) training appears prevalent and all buying agents participating in the survey were DAWIA certified, only half stated that market research received any formal training at their activity. In order for principle number ten to be adhered to, skill acquisition and development must be nurtured through an effective market research training program.

b. Buying Agents

Personal and personnel skills required of a buying agent in the performance of effective market research can be categorized into four distinct groupings. Specifically, these are Communication Skills, Information Technology Skills, Source Identification Skills and Personal/Interpersonal Skills. Within each of these skill categories, further distinction can usually be made between those skills used in Data Collection and those used in Data Analysis.

Communication skills consist of those skills needed to ensure the buying agent fully comprehends what is being told to them and that others clearly understand what the buying agent is attempting to communicate. A prime example of a Data Collection communication

skill is the buying agent's ability to formulate and ask detailed questions. Other examples within this category include; the ability to read and understand the material presented, the ability to organize thoughts and convey them orally, or in writing, to others, and telephone skills. Communication skills relating to data analysis consist of a buying agent's ability to form questions aimed at eliminating confusion or lack of understanding. These can consist of communications skills utilized to clarify financial, technical, statistical and other forms of analysis required to reach a prudent decision regarding a procurement.

Information Technology skills relate to the buying agent's ability to use personal computers and access applicable databases which may render relevant market research data. Examples include the ability to use the Internet and other electronic mediums of information dissemination, such as querying Government databases. Regarding information technology and data analysis, numerous software programs are now readily available which can assist a buyer in organizing and analyzing data received to market research efforts. For example, spreadsheet programs can be used to perform variance and statistical analysis between alternative sources of supplies or potential items which may meet a requirement.

Source Identification skills relate to a buying agent's ability to determine where best to look in order to gather the appropriate market research data. In the data collection phase of market research, this skill includes knowing the various methods, or techniques, of market research which may be appropriate, knowing the persons or agencies which may be able to assist in the process and knowing what resources may hold the relevant market research data for the particular procurement. Insofar as data analysis goes, source identification also relates to knowing where to go to perform the appropriate analysis. For example, to determine the

economic status of a certain market segment, does the buying agent know how to gather and analyze key market indicators such as the Consumer Price Index (CPI) or the Bureau of Labor Statistics, which may be useful in determining relevant market trends or labor costs?

Lastly, the Personal/Interpersonal Skill category consists of those skills that don't fall neatly into one of the aforementioned categories, yet are key to the buying agent's ability to perform market research. These consist of both data collection and analysis skills, as well, yet the distinction between these two categories is often unclear. The following are some examples of what the researcher considers Personal/Interpersonal market research skills: ability to comprehend the need's relationship to the system or other components, networking skills, customer service skills, awareness of what other activities are doing, willingness to conduct market research, knowledge of marketing and competitive processes, value analysis, and the ability to collect and organize data into a usable medium.

Clearly, all the skills mentioned above will contribute to the buying agent's ability to conduct effective market research. Some of the skills are innate to some, while others have to be acquired no matter who the individual. Although an activity's manager has the responsibility to ensure training is conducted, buying agents must take a proactive approach to acquiring any skills in which they feel they are deficient.

11. Market Research Principle No. 11

A thorough understanding of the economic dynamics prevalent within each market segment is critical to determining the necessary market research data to be obtained and to the subsequent evaluation and analysis of these data.

a. *Management*

Adherence to this principle dictates that management must understand that different industries have different characteristics, including those relating to supply and demand, and they must create an environment in which buying agents can become experts in the industries for which they are responsible. As any given industry can be complex, the fewer the industries any one buyer is responsible for, the better.

Having buying agents organized around specific types of goods and services allows the buyer to become more experienced and knowledgeable about the particular industry. Knowledge of an industry includes such important factors as the extent of competition within the industry, common terms and conditions, interest rates, exchange rates, standard warranties, rate of technology advancements, availability of critical supplies, labors conditions and much more. Additionally, the specific industry conditions relating to supply and demand must be understood in order to determine the Government's relative power in the negotiation process, once all other information has been acquired by the buying agent. As all these economic factors and dynamics are key to a prudent business decision, management must facilitate the gathering of all critical industry data by having the buying agents concentrate on one, or several, but not all, industries.

b. *Buying Agents*

The researcher believes that in order for a buying agent to become proficient at determining and evaluating economic dynamics within a particular industry, attending a course on macro-economics, and then one on micro- economics is the best means of acquiring this skill. However, as this may not be feasible, the researcher recommends buyers remain

within one industry, or a few industries, until they have become thoroughly versed in the prevalent inter-relationships of that market. Over time, a buying agent will begin to notice trends just by becoming very familiar with the market segment.

A prime example of the economic dynamics on the market segment deals with the extent of competition. The *Five Forces Model of Industry Competition*, developed by Michael E. Porter, provides a cursory perspective of competition factors effecting a given market that buyers may find useful. In his model, Porter identifies the following five basic competitive forces which exist in a market [Ref. 26]:

1. The threat of new entrants to the market.
2. The bargaining power of the firm's suppliers.
3. The bargaining power of the firm's customers.
4. The threat of substitute products.
5. The intensity of rivalry among competing firms.

This model is provided to give buying agents a feel for the type of economic dynamics which can affect a market and ultimately, the type of data a buying agent should be attempting to acquire specific to the market in order to perform a better evaluation of the options available to meet the customer's needs.

Once buyers get a feel for how certain factors affect one market segment, they can then begin to transfer those fundamentals onto new market segments in order to evaluate them. Experience and a willingness to understand economic dynamics within each market segment is the key to acquiring this skill.

12. Market Research Principle No. 12

The degree of managerial emphasis and support of market research within the Federal Acquisition process is directly related to the benefits to be realized as a result of conducting market research.

a. Management

In order to ensure compliance with the twelfth principle of market research, management must empower the buyers, provide an environment conducive to risk management, allow for frequent and direct communication between the buyers and their customers, organize the activity in a manner most conducive to effective market research and incentivize buyers through various reward systems.

Empowering buying agents means giving them the decision-making authority, where applicable and legal, and ultimately, a sense of ownership over the procurement process they are directly involved in. If a buyer has demonstrated the ability and responsibility in the past, reward him/her by delegating the authority to approve contract awards consistent with their level of skill and responsibility. The buyer's added responsibilities through empowerment will incentivize them to increase their level of performance for such simple reasons as self-gratification and pride. Regarding market research consider the following illustration: Suppose someone asked your opinion on what was the best economy-type car available in the market. Now suppose your next performance evaluation rested upon you alone deciding what the best economy-type car was and how much you paid for it relative to the average sales price. Do you suppose your level of effort would be different in these two circumstances? Simply stated, it is one thing to contribute to a process and its outcomes and

quite another to own that process and be solely responsible for its outcome.

Creating an environment which encourages risk management, vice risk avoidance, is another action recommended to ensure adherence with principle number one. Allowing your buyers to pursue alternatives which may not yield a successful outcome, yet based on their experience and judgment, the buyer feels it may, will encourage innovation and eventually harvest new ideas and procedures which may revolutionize the way you currently conduct business. Insofar as market research is concerned, risk management can manifest itself in the rendering of best value determinations. Assuming the buyer has a thorough grasp of the customer's requirement, the buyer must feel confident in their authority to weigh possible trade-offs being presented to them by the market and ultimately decide on what they consider to be the best value for the customer. One example may involve warranties. Market research may uncover warranties available which would cost the customer additional funds, yet based on other market research data, the item has a track record of never breaking, so the buyer may decide the best value is the purchase without warranty. Naturally, the buyer should be discussing the options with the customer, but undoubtedly the customer will be relying on the buying agent to either make or recommend the ultimate purchase decision.

Organizing the activity in a manner most conducive to effective market research can be done in several ways and clearly demonstrates the manager's commitment to market research. In the case of many activities, organizing in support of market research may require zero effort. If the activity is organized around the types of goods and services the buyers perform, the researcher suggests the activity *hold steady*. Organizing around goods and services is the optimal means of organizing in support of market research. This method

allows each buyer to become the activity's expert in a particular market or markets. A buyer who performs procurements specifically relating to food services, for example, is more frequently involved in this type of procurement and will be a more knowledgeable and better prepared buyer as a result. Conversely, if the same buyer has to conduct market research, and a subsequent buy, on a transportation procurement, and they haven't been involved in this type of buy for over a year, they will undoubtedly have a lot of catching-up to do.

The only negative aspect relating to organizing by good or service is that the manager must be sure to avoid being placed in a situation where an individual, or individuals, become indispensable. Managers must ensure that each market has more than one expert at the activity, so if the Food Services expert retires, another can fill in. In order to avoid this situation, cross-training between buying agents must take place.

An alternative to the aforementioned manner of organizing in support of market research is to have a division, or workgroup, within the contracting office whose exclusive responsibility is to conduct market research for all the other buyers. As the use of the IMPAC card is gaining popularity, the tremendous workload relating to small purchases is being removed from the DoD field contracting activity, which allows them to place additional resources elsewhere. As a fair percentage of remaining buys could be classified as routine, non-complex and of relatively low dollar value, these simpler procurements could remain with the buyers, while the more complex, urgent and higher dollar-value procurements could be passed to the newly formed *cadre* of market research specialists. These specialists could now be relied upon to perform effective market research and would relieve the other buyers of this responsibility so that they could focus more on the other administrative contracting issues and

put more effort into customer service related issues. If the activity is not organized around the goods and services, the researcher contends the next best method is to be organized around customers, and create a division of market research specialists to assist the buyers.

The manager has various reward systems which can be used to provide additional incentives to buying agents to perform market research. The periodic evaluation process is a valuable tool which can be modified to include, directly or indirectly, factors which evaluate the buyer's attitude and effort regarding market research. Many activities already perform an *Employee of the Month/Quarter* recognition program which can also incorporate market research as an evaluation factor. Lastly, recognizing outstanding examples of market research efforts undertaken locally, and using these examples to share the *lessons learned* with the rest of the buying agents make the individual who performed the feat feel good, while simultaneously achieving valuable training for the rest. Rewarding buying agents professionally for their increased use and expertise in market research can assist in providing added incentives for buyers to want to excel in the performance of this process.

b. Buying Agents

The degree of managerial emphasis and support of market research within the Federal Acquisition process is a critical *input* into the buying agent's market research process. As such, the environment created and maintained by the manager directly contributes to the benefits to be potentially realized as a result of conducting effective market research. Specifically, it is the activity's mission, vision, guiding principles, goals and strategy, and the degree to which these are supported by management, which will either foster an environment conducive to effective market research, or act as a barrier to the process.

The activity's mission is its purpose for being, and takes into account how it will perform its primary objective or objectives. A mission statement is "a clear statement of the purpose of the organization or of the function that the organization is attempting to fulfill..." [Ref. 27:p. 71] It provides a general, or broad, understanding, to all members of the activity as to *what* function the activity will perform, *who* does the activity perform the function for, and *how* will it perform the function. It is the organization's *raison d'être* (reason for being). To begin with, a manager of a DoD field contracting activity must determine if a mission statement has already been created. Next, the manager must determine if the mission statement truly reflects the purpose of the activity, who it is attempting to serve and how it will achieve its purpose. Most importantly, regarding market research, is it clear to the members of the activity, specifically the buying agent's, that the mission of the activity encompasses the performance of effective market research? For example, the *how* within the mission statement may include "using the latest initiatives of acquisition reform...". Although this example does not specifically address market research, most usually consider market research to be an acquisition reform initiative. By including language to this effect in the mission statement, the manager is conveying to the members of the activity that the use of acquisition reform initiatives, including market research, is highly encouraged.

An organization's vision defines the organization's desired end-state. In other words, given a best-case scenario, where does the activity see itself at a given point in the future. "The vision process furnishes the basis for logical and congruent organizational policy, consistent organizational purpose, and harmonious organizational effort." [Ref. 28:p. 1] Accordingly, managers of a DoD field contracting activity must ensure that they are

providing, and clearly communicating, organization direction, taking into account the need to conduct market research.

Guiding Principles establish the values of the organization which members are expected to adhere to in the performance of their duties. For example, *maintaining integrity and loyalty* or *quality of work* are examples of guiding principles that an activity may hold up as examples of what the activity stands for, represents and how it wants to be viewed by its stakeholders (customers in this case).

The activity's goals are generally more specific accomplishments the activity is attempting to achieve. Organizations often have multiple goals, as they are more detailed, and care must be taken to ensure all goals are in congruence, or do not conflict with one another. An example of a DoD field contracting activity goal might be, *To add significant value to our customers' organizations by assisting them in the acquisition of best value goods and services so that they may perform their mission continuously and at maximum effectiveness.* Because organizations often have multiple goals, the researcher recommends the manager allow for the creation of a goal specifically relating to the performance of effective market research. By *allow*, the researcher is encouraging the manager to have associates, or buying agents, personally create the goal concerning market research. This develops a greater sense of ownership over the process, which will ultimately make it a more effective process. A sample of such a goal follows: *Effective market research will be incorporated into every procurement with the goal of obtaining the best product or service possible.*

Strategy relates to how the activity plans to achieve its mission. The researcher contends that a DoD field contracting activity must incorporate effective market research into

its strategy. Strategy implies a concerted and well-planned effort towards the accomplishment of a goal. Market research, as a key component of the activity's strategy, will hopefully translate into emphasis by management, and allocation of the necessary time and resources to perform this vital function.

This *input*, described as managerial emphasis, into the buying agent's market research process, entails many facets, all of which could be termed vague or ambiguous. The activity's mission, vision, goals, etc. are actually intended to be a bit uncertain to allow those in the activity the flexibility to adhere to each as best they see fit. It's analogous to performance-based contracting, where the Government tells industry *what* it needs, and industry decides *how* best to meet the need. Managerial emphasis on market research demonstrates support to the buyers in their performance of this function, while empowering buyers to perform it as best they see fit, providing they remain within the activity's established guiding principles and design their efforts towards the accomplishment of the activity's, and customer's, goals.

13. Market Research Principle No. 13

The degree of market research performed for a specific requirement should be in consonance with the requirement's urgency, estimated dollar value, complexity and the buyer's past experience.

a. Management

Management must be consistently cognizant that market research, although extremely valuable in many instances, must be performed as the situation dictates. Market research must not be performed merely for the sake of "checking the box", but only when it

adds value to the procurement process and its results. Specifically, the degree to which market research should be conducted, is contingent upon the relevant factors of the acquisition. These factors, as principle number thirteen states are; urgency, dollar value, complexity and the buyer's past experience. In order for the manager of a DoD field contracting activity to ensure compliance with this principle, they must empower buyers to use their discretion as to what level of market research effort should be performed on any given procurement, periodically review market research documentation and serve as an advisor when doubt exists on the part of a buying agent.

Most managers of a DoD field contracting activity would agree that the workload placed upon the activity is challenging. The resources, specifically personnel, are in short supply, while the demands upon the activity seem to be increasing. It is an inherently managerial responsibility to prioritize the numerous demands placed upon the office and balance these against his or her constrained resources. Under these operating conditions, the manager must allow each qualified and well-trained buying agent to determine for themselves the level of market research effort each procurement should involve. Empowering and trusting the buying agents, after a manager has ensured they are properly qualified and trained, is the only realistic means of adhering to the thirteenth principle.

Furthermore, the requirement that market research efforts be documented allows a manager to periodically review what buyers have done and they can assess whether they feel it was appropriate or not. The best method to accomplish this is to discuss the procurement with the buyer one-on-one. Showing interest in their work has tremendous advantages of its own, while it gives the manager a more detailed insight into the procurement process

undertaken by the buyer. This also allows for questions to be answered and possible alternatives to be considered during future acquisitions. The review by the manager must not be construed by the buyers as a means of "checking up" on them.

Additionally, as the manager, the buyers must feel comfortable approaching you if they have any doubts as to the level of market research effort that should be conducted for a particular procurement.

b. Buying Agents

Adherence to principle number thirteen by the buying agents merely requires common business sense. A prudent and reasonable person would not drive all over town just to save fifty cents on gasoline. Similarly, a buying agent wouldn't spend a week researching a routine procurement for stainless steel forks needed by the local galley. The buyer should establish, in advance, the amount of effort they think should be spent on the acquisition in an attempt to adhere to it. This is important because it is sometimes easy to lose sight of the goal once one gets further into a process. For example, the FAR's requirement to ensure that a least three sources are identified for procurements between the micro-purchase (\$2,500) and \$100,000.00 to ensure adequate competition is a good benchmark for buyers. Conversely, buyers should not be settling for less on account of urgency or pressure from the customer. As effective market research can take as little as an hour, or as long as a year to accomplish, the buyer must trust their experience, intuition and common sense when deciding what extent of market research is appropriate for the procurement in question.

C. MARKET RESEARCH MODELS

1. The Managerial Structure of Market Research Model

Utilizing the revised Harvard Business Model as a template in developing the *Managerial Structure of Market Research Model* (Figure 13), the researcher has organized the thirteen principles, and the recommended actions required by management to ensure adherence to these principles, into a second-generation input-process-output systems model. The researcher's model is designed to graphically represent the interrelationships between the manager's actions necessary to adhere to the market research principles and the various components of the market research system. Specifically, the component parts of the system model are comprised of the Input, the Organizational Design Factors (process) and the Outcomes.

The managerial input to the market research process at the field contracting level consists of Setting Direction and Environment. Setting direction and environment includes such factors as establishing the activity's mission, vision and goals, and creating an environment conducive to the performance of effective market research.

The *Organizational Design Factors* represent the manager's contributions to the process itself. Simply stated, this section addresses the question, "What can the manager do for, or provide to, the buying agents to ensure they will be able to conduct effective market research through adherence to the thirteen market research principles?" These can be referred as the manager's facilitation measures. These can be further divided into the following categories: Measurement and Control, Training and Development, Reward Systems, and Documentation. Measurement and Control identifies benchmarks and metrics the manager

must utilize to gauge the effectiveness of the market research program at the activity. Training and Development identifies what development is needed by the buyers and how the development will be provided to the performers of market research. The Reward Systems identifies the manager's tools to incentivize the buying agents to want to conduct effective market research. Lastly, the Documentation subset of Organizational Design Factors identify the manager's means of maintaining vital market research information to facilitate continuous improvement of the process.

As the name implies, the *Outcomes* portion of the model reveals the benefits to be realized, provided the proper input and performance of the process occurs. For example, as the model indicates, if a manager ensures the input to the system is provided in accordance with the applicable principles, and the process is conducted in accordance with applicable principles, then cost savings and increased competition will be some of the potential results.

2. The Buying Agent's Market Research Process Model

The researcher's *Buying Agent's Market Research Process* model (Figure 14) is a modification to a rudimentary input-process-output systems model. Unlike the management model, this model illustrates the actions required of the buyers themselves, to ensure adherence to the thirteen market research principles. Specifically, this model addresses the actions taken *within* the performance of the process, as opposed to *in support of* the process.

The *Input* component to this model identifies the requirements and abilities needed by the buying agents before beginning the market research process. For example, the buying agent must first understand the customer's requirement before conducting research on how best to meet that need.

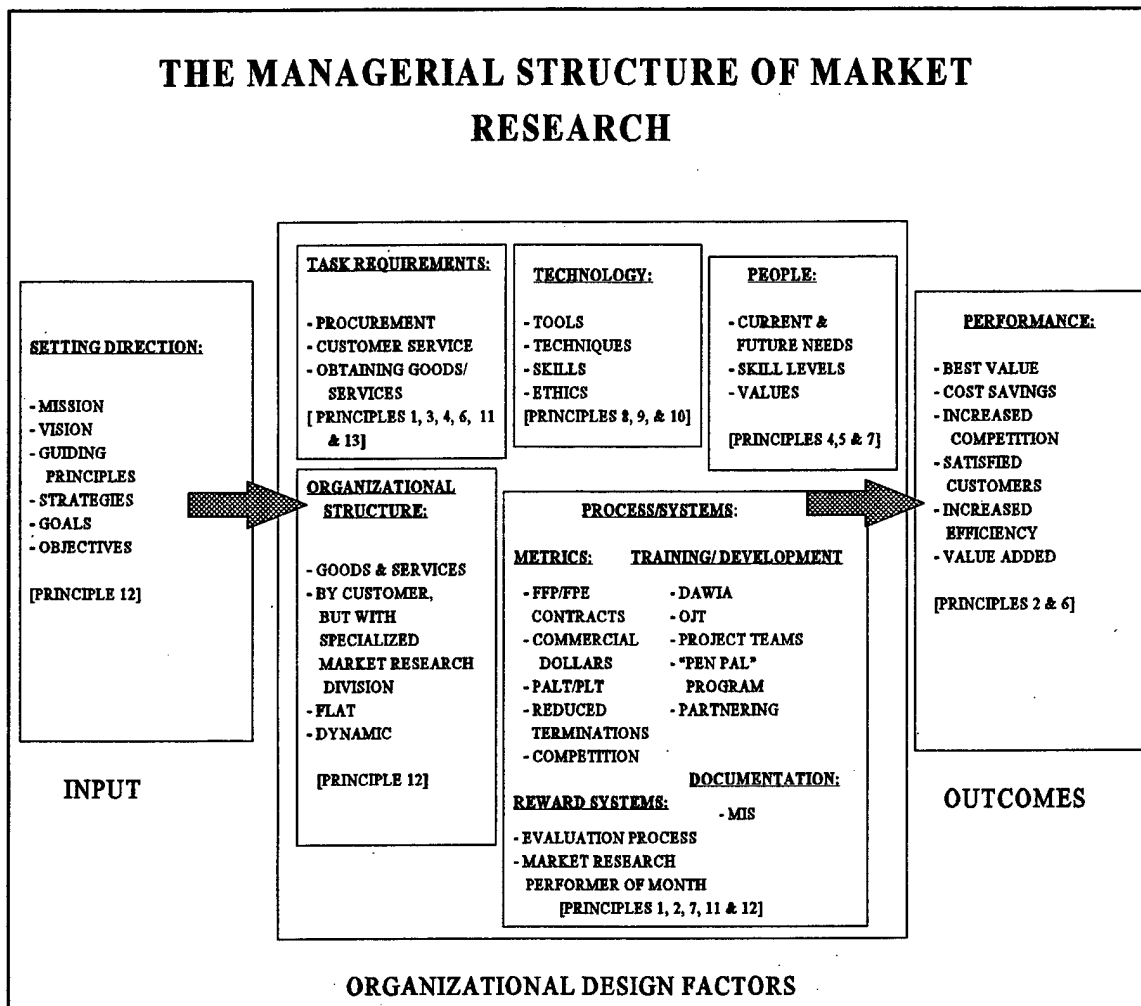


Figure 13 (Source: Developed by Researcher)

The *Process* portion of the model identifies the actions necessary by the buying agents to adhere to the applicable principles of market research, which will then result in effective performance of the process. For example, if a buying agent is unable to define the applicable market segment, they will not be effective in their performance of market research.

Lastly, the *Output* section of the buyer's model share many of the same principles as the outcomes section of the manager's model. It highlights the beneficial results which may occur, given effective input and performance to the market research process.

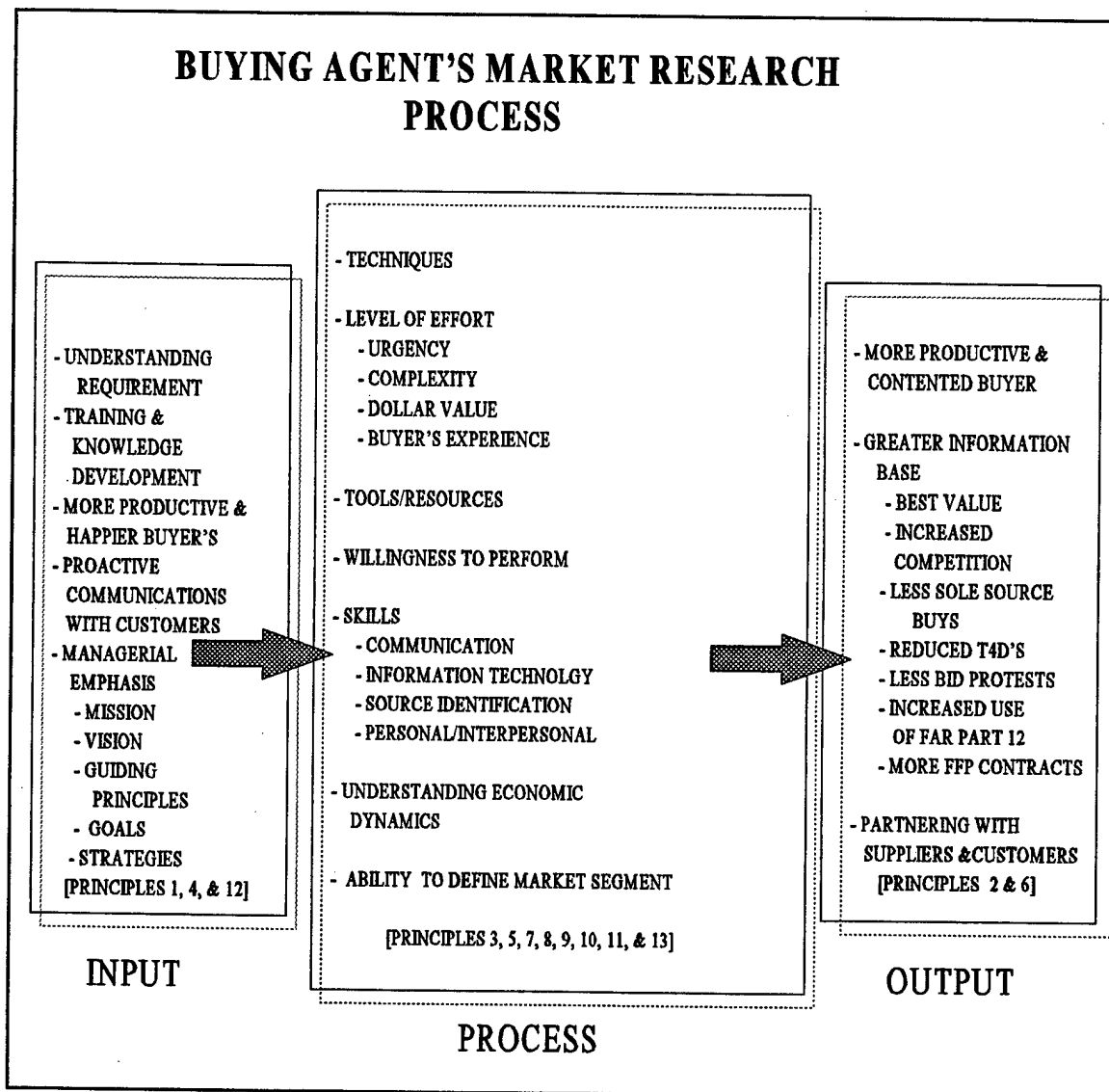


Figure 14 (Source: Developed by Researcher)

3. Integration Guidance

This section is designed to provide assistance to the manager and buying agents of a DoD Field Contracting Activity in their efforts to successfully integrate an effective Market Research program at the activity. From both perspectives, the manager's and the buying

agents', the integration process must be viewed in terms of (1) what elements must be provided as inputs to the process, (2) what subprocesses and elements are incorporated within the process itself, and (3) what are the anticipated outcomes of each respective Market Research Process. Figures 13 and 14 above present these models.

Beginning with the *Input* section of both models, the manager and the buying agents should conduct an evaluation of the extent to which these input components are currently being addressed, or recognized, within the activity. For example, the manager must determine the extent to which the activity's Mission Statement or Vision directly addresses the use of effective market research. At one end of the spectrum, the activity's Mission Statement may include language which identifies the market research process by name, while the other extreme may include language which is completely incongruent with the performance of market research at the activity. Similarly, buying agents must first assess the degree to which they are currently complying with the Input components identified in their Market Research Process model. One example includes evaluating the degree to which the buying agents currently seek full and effective communications with their customers and whether or not they are being proactive in their attempts to do so.

Regarding the *Process* portion of each model, there are distinct differences as to how the manager and the buying agents should go about integrating their respective process elements. From the manager's perspective, the *Process* portion of the model includes processes or systems provided to support buying agents in their market research efforts. As managers are not the actual performers of the process, their role is to provide as much support as possible to their subordinates who are performing the process. These support

elements which are identified within the "Organizational Design Factors " of the *Managerial Structure of Market Research* model (Figure 13), must be evaluated by management and integrated or strengthened, as appropriate. The manager must evaluate each subprocess within this portion of the model (Task Requirements, Technology, Organizational Structure, etc.) and determine if they are currently doing everything in their power to support the buying agents in their efforts to perform effective market research. For example, the manager must assess whether or not any metrics are currently being applied to gauge the level of effectiveness of market research at the activity. If no metrics currently exist, the model provides some metrics which can easily be implemented at the activity. Additionally, the model can be reviewed to ascertain which of the researcher's market research principles are applicable to a given segment of the activity's market research process. The manager can use this information to provide further direction and support to the buying agents at the activity.

The *Process* section of the *Buying Agent's Market Research Process* model (Figure 14) was developed to provide a tool by which buying agents can evaluate the extent to which their individual market research efforts are congruent to an effective Market Research program. Buying agents, after first assessing the *Input* portion of their respective model, should utilize the *Process* portion of the model as a template to benchmark their market research efforts. The process section identifies elements which the researcher feels are critical to a buying agent's ability to successfully perform effective market research. Buying agents should evaluate their individual level of expertise in each area identified within this section and determine whether strengthening of these areas is necessary. Upon referring to this portion of the model, if the buying agent feels deficient in any way, they must address their concerns

with the activity's manager and pursue alternative avenues to eliminating any perceived weaknesses.

Lastly, the *Outcomes* section of each model, the manager's and the buying agent's, should be utilized in serving as a reminder that if the Market Research process is performed effectively to this point, the identified benefits stand to be realized. Mostly, the Outcomes section of the two models are very similar. The only distinct difference between the two models regarding this section, is the Buying Agent's model lists, in addition to those shared by the Manager's model, some personal benefits which may be realized as a result of performing effective market research. This section of the model should be reviewed periodically, by both management and the buyers, to ascertain whether these benefits are in fact being realized, or if not, why not?

In summary, both management and the buyings agents should utilize the models as templates, or a means by which to assess the current level, or existence, of fundamental components to an effective Market Research program. Additionally, these models can serve as tools to provide direction as to areas the activity should concentrate on when attempting to integrate, or improve, upon its Market Research program.

D. SUMMARY

This chapter began by individually addressing each market research principle developed by the researcher. As each principle was identified, the researcher's recommended actions to ensure adherence to these principles at the Field Contracting level were provided.. Specifically, these recommendations addressed actions required by management, and those

actions required by the buying agents at the activity, to ensure adherence to each principle. The actions recommended for management dealt with market research program implementation and maintenance concerns. These managerial actions are aimed at supporting the buying agents' in their Market Research efforts. The actions recommended for the buying agents were aimed toward the actual performance of the process *within* their established procurement process. Next, two separate models were introduced. These were the *Managerial Structure of Market Research* (Figure 13) and *The Buying Agent's Market Research Process* (Figure 14). The researcher believes use of these models can provide a valuable tool to both the manager and the buyers at a DoD field contracting activity, who are attempting to implement and maintain an effective market research program.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

Though the requirement to conduct market research has been around for quite some time, only recently has the Acquisition community focused its attention on this effort. Unfortunately, as with many acquisition reform initiatives, the mandate alone to perform market research does not automatically translate to knowledge and proper application of the process throughout the Federal Acquisition workforce. Currently, market research at the Field Contracting level is deficient, despite the apparent willingness on the part of buying agents to perform the process. In order for the Federal Government in general, and the customer in particular, to reap the numerous benefits provided through market research, managers of DoD Field Contracting Activities must take an active role in the implementation and maintenance of an effective Market Research program at their activities.

B. CONCLUSIONS

The scope of this research effort has lead to several conclusions concerning the current status of market research efforts at the DoD Field Contracting Activity level.

Conclusion 1. There are thirteen Principles of Market Research which must be recognized in the development and execution of any effective Market Research program.

The thirteen Principles of Market Research (see Appendix B) are all fundamental to the success of an effective Market Research program. The researcher contends that the aggregate effect of the adherence to these thirteen principles provides the necessary

framework and guidance from which to build and maintain an effective Market Research program. Any deviation from these thirteen market research principles experienced in the designing, implementation, and execution of a market research program within a Department of Defense Field Contracting Activity, will ultimately result in reduced efficiencies, misused resources, and ultimately ill-advised acquisition decisions.

Conclusion 2. Implementation of a successful Market Research program at a DoD Field Contracting Activity must be addressed at both the Managerial level and the Buying Agents' level.

The researcher concludes that successful implementation of an effective Market Research program requires specific actions on the part of management which are necessary to support the buying agents in their performance of market research. The thirteen Principles of Market Research comprise elements which relate to both the manager and the buying agents. As the researcher has already concluded that all thirteen principles must be recognized in any effective Market Research program, both management and the buyers must correspondingly contribute to the process. For example, one principle involves ensuring that buyers are afforded sufficient market research training. Additionally, provided the management has already provided adequate support to the process, the buying agents themselves must take certain steps to ensure they are actually performing effective market research. For example, does the buying agent possess the requisite skill and desire to perform the process effectively? Successful implementation of an effective market research program requires both management and the actual performers, the buying agents, to put forth their best efforts regarding the process.

Conclusion 3. There is sufficient awareness of the requirement to conduct market research, and of the process itself, from which to begin building an effective market research program.

The responses to the surveys clearly indicate that the buying agents at the field contracting activity level do have a fundamental understanding as to the requirement to conduct market research and generally what the process entails. The researcher was initially concerned that if treated as just another acquisition reform initiative, buyers would dismiss the process as another *here today, gone tomorrow* phenomenon. Additionally, as market research has only recently been afforded its own part (chapter) within the FAR, the researcher suspected many of the buying agents at the field level would either have not heard of the process at all, or would only be slightly familiar with it. The responses to the survey did indicate to the researcher that most, almost ninety percent, did in fact have a basic understanding of the market research process.

Conclusion 4. Most buying agents at the DoD Field Contracting level feel market research is a worthwhile process which can yield many benefits.

This is particularly encouraging to the researcher. Often, the researcher suspects, it appears to the performers of the acquisition process that reform initiatives are merely someone's *pet project* and given a little time, the initiative will no longer be a priority. However, based upon the responses to the market research survey, buying agents in the field seem genuinely excited about the potential market research holds. The researcher had firmly believed that responses to the survey would indicate a degree of frustration on the part of the buying agents regarding market research. Specifically, it was felt that there might exist significant doubt on the part of buyers as to the actual worth of the process, as opposed to

it being perceived as just another administrative requirement to be added to the significant requirements they had to deal with already. However, responses provided to the survey indicate that buying agents genuinely feel market research has merit and should be incorporated into the procurement process.

Conclusion 5. Buying Agents at the DoD Field Contracting level *do not fully understand* market research.

While the buying agents do appear to have a general understanding of the process (Conclusion 2), they are certainly lacking on many of the specifics regarding market research. As the survey questions began to probe for a deeper understanding of the process by the buying agents, the responses indicated that mostly the degree of understanding was in fact quite basic. The researcher felt that in responding to detailed questions about the performance of market research, such as those relating to skills, techniques, and metrics, the respondents were merely acknowledging what the researcher was proposing. In other words, the buying agents were providing responsiveness identical to those offered as examples by the researcher and were not offering additional unsolicited responses.

Conclusion 6. Market research at the DoD Field Contracting level is *not a continuous process*.

Although market research in the form of investigations conducted in support of particular procurements is being conducted with some degree of regularity, market surveillance is not being performed at the field contracting level. Almost eighty percent acknowledged that continuous market research efforts, or market surveillance, was not being conducted at the field contracting level. The researcher is unable to determine whether this fact is the result of insufficient resources or unfamiliarity with this portion of the market

research process. The researcher suspects it is a combination of both, but mostly due to the survey participants' lack of understanding of this phase of the market research process.

Conclusion 7. DoD Field Contracting Activities are generally *not organized in a manner conducive to the performance of effective market research.*

Many of the activities represented in the market research survey are currently organized around customers or other factors, and not specifically around goods or services. While thirty-eight percent of the activities were organized around goods and services, the method the researcher asserts is most conducive towards effective market research, sixty-two percent were not. As increased exposure and experience within particular and limited markets is essential to the performance of effective market research, the researcher believes failure to organization the buying agents around goods and services serves as a barrier to effective market research.

Conclusion 8. Not all Buying Agents at the DoD Field Contracting level are currently performing market research.

Alarming, there are numerous buying agents at the field contracting level who are still not personally involved in the market research process. A full thirty-three percent stated they did not personally conduct market research. Although market research is not required for all procurements, the researcher believes that all buying agents should have at least some involvement in the process. To have one in three buying agents at the field contracting level not performing market research is particularly noteworthy and, at least to the researcher, serves as another barrier to the implementation of effective market research at the field level.

Conclusion 9. *Little to no communication exists between DoD Field Contracting activities insofar as market research efforts are concerned.*

Failure to share valuable information between DoD Field Contracting Activities, particularly as it relates to market research, results in tremendous inefficiencies and duplication of efforts. The researcher strongly suspected this to be the case prior to conducting the survey process. The Department of Defense's inability to adequately share information between field contracting activities, particularly market research data, results in significant duplication of efforts and subsequent inefficiencies.

Conclusion 10. *Some technical barriers do exist which prevent the performance of effective market research.*

Technical barriers, as indicated by responses to survey questions, are insufficient personnel and insufficient ADP equipment. Not surprisingly, over one-third of the survey participants stated that they did not have enough personnel to conduct effective market research. Furthermore, while Internet technology now allows for significant market research-related data to be obtained merely by accessing the super-highway, many DoD Field Contracting Activities have not caught up with the times and do not have sufficient ADP equipment to allow buyers to conduct effective market research.

Conclusion 11. *Market research training is not being conducted at the DoD Field Contracting level.*

Market research training is severely lacking and needs to be improved. Almost half of the activities surveyed do not have any form of market research training incorporated into their activity's Training Program.

Conclusion 12. Market research is *not highly emphasized* at DoD Field Contracting Activities.

According to survey responses, market research has not been made a priority for twenty percent of the field contracting activities participating in the survey. The researcher feels this should be much closer to zero percent based upon the statutory requirement to perform the process and the recent re-emphasis being placed upon the process by the Federal Acquisition Streamlining Act (FASA).

Conclusion 13. Currently, *no metrics exist* at the DoD Field Contracting Activities to measure the effectiveness of market research.

Only six percent of survey participants stated that they currently applied any form of metrics to measure the effectiveness of their Market Research program. The almost complete non-existence of metrics utilized in measuring market research at DoD Field Contracting Activities casts some doubt as the existence of any formal Market Research programs at all. To effectively gauge progress of the market research program, metrics must be established and used on a routine basis.

Conclusion 14. Defense Acquisition Workforce Improvement Act (DAWIA) Training certifications are a priority at the DoD Field Contracting Activity level.

Every survey participant was DAWIA Training certified and most (almost 95%) were certified Level II or higher. It appears as though the Federal Acquisition community fully understands that the training and education guidelines established in this Act are vitally important, not only in terms of an overall improved workforce, but from an individual career perspective, as well. Regardless of the reasons why, the success being achieved in terms of training certifications of buying agents since the passing of the Act in 1990 is highly

encouraging.

C. RECOMMENDATIONS

Based on the conclusions of this research, the following recommendations are made:

Recommendation 1. The manager of a DoD Field Contracting Activity must make market research a priority and implement the numerous recommendations provided in Chapter V.

Specifically, in order to successfully implement an effective Market Research program at their activity, managers must;

☐ Make it clear throughout the activity that market research is a priority. This can be accomplished through:

- Including market research tenets into the activity's Mission, Vision, Guiding Principles, Goals, and Strategies.
- Incorporating market research into daily discussions.
- Incorporating performance of market research into Employee Evaluation criteria.
- Providing incentives such as employee recognition (Employee of the Month), cash awards or time off for superior market research efforts.

☐ Create an environment conducive to risk management, vice risk avoidance. Encourage innovation and creativity.

☐ Empower buying agents to make prudent business decisions at the lowest level, providing them with a sense of ownership and

responsibility for their individual market research efforts.

- ☐ Organize buying agents around types of goods and services. If this is not possible, establish a specialized Market Research Division, a group of experts in the area of Market Research, who can provide additional assistance to the other buying agents (when applicable).
- ☐ Encourage increased direct communication between buying agents, customers, and technical personnel. Utilize Partnering arrangements with customers and the use of Integrated Product Teams (IPTs).
- ☐ Provide buying agents the necessary tools to conduct effective Market Research, especially ADP equipment and access to the Internet.
- ☐ Provide quality Market Research training for the buyers at your activity. This can be done through the following methods:
 - Sources available on the Internet.
 - Teaming arrangements between buyers.
 - Designating a Market Research Champion to conduct in-house training.
 - Allowing buying agents to periodically take advantage of unique training opportunities (conferences, sales representatives).
 - Facilitate more effective communications between field contracting activities by implementing a buyer "pen pal" program, wherein buyers from your activity periodically

compare notes with a designated counterpart from another activity.

- Create a data base to facilitate storage of market investigation and market surveillance data that can be used again in the future.
- Establish metrics to gauge the success of your Market Research program. Some examples of applicable metrics include;

- * Procurement Administrative Lead Time (PALT).
- * Procurement Lead Time (PLT).
- * Increased Competition.
- * Increased proportion of Commercial Items procurements to total procurements.
- * Reduction in Terminations for Default (T4Ds) and Bid Protests.
- * Customer Satisfaction Surveys.
- * Buying Agent Surveys.
- * Reduced number of Sole Source procurements.

Recommendation 2. The Buying Agents at a DoD Field Contracting Activity must also make Market Research a priority and implement the numerous recommendations proposed for buying agents in Chapter V.

In order to fully support the successful implementation of an effective Market Research program at their activity, buying agents must;

- ☐ Become thoroughly familiar with the Market Research process. This can be achieved through;
 - Utilizing resources available on the Internet.

- Reviewing Chapter III of this thesis.
 - Seeking knowledge from other buyers at the activity.
 - Communicating with buyers from other activities.
- ☐ Take a proactive role in the implementation process. Provide thorough and frequent feedback to superiors regarding where you feel the activity is succeeding and where the activity is weak in terms of Market Research efforts.
- ☐ Encourage increased communications between yourself, your customer and technical personnel.
- ☐ Continuously attempt to improve upon your Market Research skills and use of the various Market Research techniques.
- ☐ Gain increased knowledge regarding commercial pricing strategies.
- ☐ Gain increased knowledge of market dynamics.
- ☐ Develop, through experience, a greater sense of the extent of Market Research efforts required given the complexity, urgency, and value of the requirement.
- ☐ Aggressively attempt to sharpen the skills necessary to be effective in the performance of market research, specifically relating to the following skills;
- Communication Skills
 - Information Technology Skills
 - Source Identification Skills

- Personal/Interpersonal Skills

Recommendation 3. Managers and Buying Agents should incorporate and adhere to the researcher's Thirteen Principles of Market Research.

Utilizing these 13 Principles as daily guidance will enable the activity to maintain proper focus and emphasis on the Market Research process, which in turn will result in a more effective performance of this process.

D. SUMMARY AND REVIEW OF RESEARCH QUESTIONS

Primary Question. How can a Department of Defense Field Contracting Activity successfully integrate an effective Market Research program into its operational routine, given that no formal Market Research process exists and that available resources will remain relatively constant?

Recommendation's 1 - 3 outline the requirements necessary to implement an effective Market Research program into a DoD Field Contracting Activity's daily routine. Utilization of the researcher's model for implementation (Figures 13 and 14) will enable a DoD Field Contracting Activity to successfully implement and execute an effective Market Research program. With the possible exception of increased costs associated with providing adequate ADP equipment and certain types of unique training opportunities, all of these recommendations can be implemented with the current level of existing activity resources.

Primarily, successful integration of an effective Market Research program consists of gaining a thorough understanding of the process and placing increased emphasis on its performance. Additionally, the proper environment must be established, one which is conducive to culture change, and fosters innovation and creativity. Next, ensure the buying agents have the requisite skills, or are provided the means to acquire them, and the tools and

resources necessary to do the job well. Lastly, apply metrics to gauge the progress of the market research program and make adjustments as appropriate.

Subsidiary Research Question 1. What constitutes effective Market Research?

Effective market research, as defined by the researcher in Chapter II, is the collection and analysis of relevant information which significantly improves the result of a procurement while the resources expended remain in consonance with the complexity, value, and urgency of the good or service being procured.

Subsidiary Research Question 2. What Resources are necessary to conduct effective Market Research?

Necessary resources are provided in detail in Chapter III and include any means by which a buying agent can obtain and analyze relevant market information which will facilitate the determination of a best business decision in the acquisition of goods or services for the Government. Examples of resources necessary to conduct effective Market Research include; ADP equipment, access to the Internet, i-MART, trade publications, phones, Bidder's Lists, Industry Representatives, Other Federal Agencies, Commodity Indices, U.S. Department of Commerce, and the sharing of information between activities. This list is far from conclusive, but is provided as a sampling of the many tools and resources which can be applied to conduct effective Market Research. Additional tools and resources are proved in Chapter III of this thesis.

Subsidiary Research Question 3. What skills are necessary to conduct effective Market Research and what alternative approaches can be utilized to acquire these skills?

The requisite skills were first identified in Chapter III and were subsequently

categorized by the researcher in Chapter IV as follows:

- Communication Skills
- Information Technology Skills
- Source Identification Skills
- Personal/Interpersonal Skills

Further amplification of these skill can be found in Chapters II and IV.

Subsidiary Research Question 4. What metrics could be applied to determine and measure the effectiveness of Market Research at a Department of Defense Field Contracting Activity?

Metrics of many kinds can be used to measure the success of market research at the field contracting level. Metrics which can be utilized in measuring the effectiveness of a Market Research program at a DoD Field Contracting Activity were discussed thoroughly in Chapter V. Some examples include:

- Procurement Administrative Lead Time (PALT).
- Procurement Lead Time (PLT).
- Increased Competition.
- Increased proportion of Commercial Items procurements to total procurements.
- Reduction in Terminations for Default (T4Ds) and Bid Protests.
- Customer Satisfaction Surveys.
- Buying Agent Surveys.
- Reduced number of Sole Source procurements.

Subsidiary Research Question 5. What advantages can be realized as a result of implementing an effective Market Research Program?

Numerous benefits stand to be realized as a result of conducting effective market research. These benefits were first identified through literature research and were discussed initially in Chapter III. Additionally, this listing of benefits was further built upon through responses provided by the survey participants and are provided in greater detail in Chapter

V. Some benefits include:

- Cost Savings to the Federal Government
- Best Value Procurements
- Increased Competition
- Satisfied Customers
- Increased Efficiency
- Reduced Terminations for Default (T4Ds)
- Reduced Bid Protests

E. AREAS FOR FURTHER RESEARCH

The researcher proposes the following three recommendations for further study regarding Market Research:

- * Conduct a more detailed analysis of the advantages and disadvantages to the alternative ways in which DoD Field Contracting Activities are organized and how they affect the market research process.
- * Conduct a thorough analysis of industry market research/purchasing research

procedures and determine if there are benefits to be realized if the Government adopts these commercial procedures.

* Compare and contrast procurements performed utilizing Market Research and those of a similar nature done without the use of Market Research. Conduct an analysis of the variances between the two (if any actually exist).

APPENDIX A. MARKET RESEARCH SURVEY

Activity: _____ (Optional)

Date Survey Completed: _____

1. How long have you been designated as an 1102 Government Procurement Professional? (circle one)

- A. Less than 1 year
- B. 1 - 3 years
- C. 4 - 5 years
- D. Greater than 5 years

2. Do you currently possess a Government Contracting Warrant? Yes No

3. If yes to question 2, what is the dollar threshold of your warrant?

- A. \$0 - 2,500
- B. \$2,501 - \$25,000
- C. \$25,001 - \$100,000
- D. \$100,001 - \$500,000
- E. Greater than \$500,000

4. Are you currently Defense Acquisition Workforce Improvement Act(DAWIA) Certified?

Yes No

5. If yes to question 4, what is the highest DAWIA Certification Level you currently hold?

- A. Level I
- B. Level II
- C. Level III

6. On average, how many procurements are you responsible for at any given time? (Check appropriate boxes)

	Below \$100,000	\$101,000 - \$500,000	Greater than \$500,000
0 - 5 Procurements			
6 - 10 Procurements			
11 - 20 Procurements			
21 - 50 Procurements			
Greater than 50			

7. What is *your* definition of Market Research?

8. Do you feel you have a sufficient understanding of what Market Research within the Federal Procurement process entails? Yes No

9. Do you *personally* conduct Market Research on any procurements? Yes No

10. Do all 1102s conduct Market Research on their particular procurements or are there specially trained 1102s who perform the function for the entire office?

- A. Each 1102 performs own Market Research.
- B. Specially trained 1102s conduct Market Research for all buyers.
- C. This activity has its own Market Research division.
- D. 1102s do not conduct Market Research.
- E. Other: _____

11. Who outside contracting is involved in conducting Market Research at your activity?

- A. Technical Personnel
- B. Requesting Activity
- C. End User
- D. An Outsourced agency/company
- E. Other (Specify) _____
- F. A combined effort between _____ & _____
- G. Nobody conducts Market Research

12. Whether or not you specifically conduct Market Research, as an 1102, do you feel it should be your *exclusive* responsibility to conduct Market Research when appropriate? Yes No

13. If no on question 12, who do you feel should be responsible for conducting Market Research?

- A. Technical Personnel
- B. Requesting Activity
- C. End User
- D. An Outsourced agency/company
- E. Other (Specify) _____
- F. A combined effort between Contracting & _____
- G. Market Research is unnecessary in my opinion

14. In your opinion, at least some degree of Market Research should be conducted on which of the following procurements?

- A. All procurements
- B. Greater than \$2,500
- C. Greater than \$25,000
- D. Greater than \$100,000
- E. Greater than \$500,000

15. In your opinion, are there certain types of procurements, other than dollar value, which warrant increased Market Research efforts? Yes No

16. If yes on question 15, specifically which types?

- A. _____
- B. _____
- C. _____

17. Would you categorize Market Research at your activity as a continuous process which is conducted independent of a specific Purchase Request? Yes No

18. If no on question 17, in your opinion, Market Research at your activity is conducted only as it applies to a particular procurement? Yes No

19. Currently, the buyers within the procurement office at your activity are predominantly organized around:

- A. Monetary thresholds (Micro, SAT, etc.)
- B. Types of goods/services being procured.
- C. Geographic region(s)
- D. Customers
- E. Type of Contract
- F. Other: _____

20. In your opinion, the current way in which your buying office is organized facilitates the incorporation of effective Market Research into the procurement process? Yes No

21. If no on question 20, what do feel would be the optimum way to organize the procurement office to facilitate effective Market Research during the procurement process?

- A. Monetary thresholds (Micro, SAP, etc.)
- B. Types of goods/services being procured.
- C. Geographic region(s)
- D. Customers
- E. Type of Contract
- F. Other: _____

22. The top five methods you employ when conducting Market Research are (Identify as 1, 2 ... 5 respectively):

- () Contacting knowledgeable individuals in Government and industry regarding market capabilities to meet requirements.
- () Reviewing the results of recent market research undertaken to meet similar or identical requirements.
- () Publishing formal requests for information in appropriate technical or scientific journals or business publications.
- () Querying Government data bases that provide information relevant to agency acquisitions.
- () Participating in interactive, on-line communication among industry, acquisition personnel, and customers.
- () Obtaining source lists of similar items from other contracting activities or agencies, trade associations or other sources.
- () Reviewing catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.
- () Conducting interchange meetings or holding presolicitation conferences to involve potential offerors early in the acquisition process.
- () Utilization of commercial services that specialize in product and source identification (Dun and Bradstreet, Thomas Register, etc.)
- () Utilization of Commercial Advocate Forum's I-Mart on-line Market Research tool.
- () Commerce Business Daily (CBD) announcements
- () Other(s) () _____

23. Place a check mark by each method of conducting Market Research which you do not routinely employ:

- ☐ () Contacting knowledgeable individuals in Government and industry regarding market capabilities to meet requirements.
- ☐ () Reviewing the results of recent market research undertaken to meet similar or identical requirements.
- ☐ () Publishing formal requests for information in appropriate technical or scientific journals or business publications.
- ☐ () Querying Government data bases that provide information relevant to agency acquisitions.
- ☐ () Participating in interactive, on-line communication among industry, acquisition personnel, and customers.
- ☐ () Obtaining source lists of similar items from other contracting activities or agencies, trade associations or other sources.
- ☐ () Reviewing catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.
- ☐ () Conducting interchange meetings or holding presolicitation conferences to involve potential offerors early in the acquisition process.
- ☐ () Utilization of commercial services that specialize in product and source identification (Dun and Bradstreet, Thomas Register, etc.)
- ☐ () Utilization of Commercial Advocate Forum's I-Mart on-line Market Research tool.
- ☐ () Commerce Business Daily (CBD) announcements
- ☐ () Other(s) ☐ () _____

24. In your opinion, does your activity consider Market Research to be a fundamental component of a successful procurement process? Yes No

25. How would you define *effective* Market Research?

26. In your opinion, does your activity have sufficient personnel to conduct effective Market Research?

Yes No

27. In you opinion, does your activity have sufficient ADP equipment to conduct effective Market Research?

Yes No

28. In you opinion, does your activity have sufficient phone-line access To conduct effective Market Research? Yes No

29. In you opinion, does your activity communicate sufficiently with other contracting activities to the extent that Market Research information is effectively shared?
Yes No

30. Are there Policy Limits at your activity which prevent you from conducting effective Market Research? Yes No

31. If yes on question 30, please explain below:

32. Are there any Technical Limits at your activity which prevent you from conducting effective Market research?

Yes No

33. If yes on question 32, please explain below:

34. Presently, do you feel you possess the skills necessary to conduct effective Market Research?

Yes No

35. Please list any personal skills you feel are necessary in order to conduct effective Market Research (i.e. knowledge of Internet and how to navigate it):

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

36. In your opinion, does your activity currently possess the skills necessary to conduct effective Market Research?

Yes No

37. Is Market Research addressed in your activity's Training Program? Yes No

38. What alternative would you recommend as a means of developing the skills necessary to conduct effective Market Research?

- | | | |
|---|-----|----|
| A. Incorporating Market Research into local Training Program. | Yes | No |
| B. Complete DAWIA Certification. | Yes | No |
| C. Attend a Market Research short-course (one to two days). | Yes | No |
| D. Attend Trade Shows at least annually. | Yes | No |
| E. Other: _____ | | |

39. In your opinion, is the time, effort and resources used in conducting Market Research worthwhile? Yes No

40. If yes on question 39, what benefits do you feel are realized through the use of effective Market Research? (More than 1 choice acceptable)

- A. Increased competition among suppliers
- B. More choices for the customer
- C. Increased likelihood of obtaining a better price for the Government.
- D. Increased leverage during negotiations with potential sources.
- F. Increased efficiency in being able to meet customers needs.
- G. Better understanding of industry practices, which may lead to obtaining a best value for the customer.
- H. Increased value of activity to customers being supported.
- I. Other Benefit(s):

1. _____

2. _____

3. _____

41. Do you currently apply any metrics in evaluating the effectiveness of your Market Research program?

Yes No

42. If you answered yes to 41, are you currently employing any of the following methods for determining the effectiveness of your Market Research program?

A. Number of suppliers responding to RFPs.

Yes No

B. Percentage of buys which are not Sole Source.

Yes No

C. Difference between initial proposal price and final negotiated contract price.

Yes No

D. Size of Supplier List for each commodity/service

Which experiences recurring demand. Yes No

E. Other: _____

F. Other: _____

43. If there is any additional information concerning Market Research at your activity which you feel would be of use in my research, please provide these comments below:

APPENDIX B. PRINCIPLES OF MARKET RESEARCH

1. If the performer of market research does not possess a comprehensive understanding of the process, they may not be successful in achieving effective market research.
2. If competition as determined by market research is adequate, then more effective contracting actions will result.
3. If pre-award market research is deficient, then the contracting process could be prolonged and the possibility of a less effective contract is increased.
4. A full understanding of the customer's requirement, or need to be met, is fundamental to the success of effective market research.
5. The ability to define the applicable market segment is fundamental to an effective market research effort.
6. The greater the amount of applicable information gathered through market research, the greater the probability that the buyer will obtain a better value through the contract action.
7. If all the factors which impact the price of a product or service are not fully understood, the probability of a less than acceptable contract is increased.
8. Effective market research necessitates the maintenance of a vehicle, or means, to keep abreast of the latest advances in technology.
9. Market research mandates the performer be aware of, understand how to use, and have sufficient access to all the tools required to conduct effective market research.
10. Market research mandates the performer gain access to, maintain, and continue to improve upon the personal skills necessary to conduct effective market research.

11. A thorough understanding of the economic dynamics prevalent within each market segment is critical to determining the necessary market research data and to the evaluation and analysis of this data.
12. The degree of managerial emphasis and support of market research within the Federal acquisition process is directly related to the benefits to be realized as a result of conducting market research.
13. The degree of market research performed for a specific requirement should be in consonance with the requirement's urgency, estimated dollar value, complexity and the buyer's past experience.

LIST OF REFERENCES

1. General Accounting Office Report, GAO/PEMD-97-3, *DEFENSE INDUSTRY; Trends in DOD Spending, Industrial Productivity, and Competition*, U.S. Government Printing Office, January 1997.
2. General Accounting Office, *Weapons Acquisition-Better Use of Limited DOD Acquisition Funding Would Reduce Costs*, GAO/NSIAD-97-23, U.S. Government Printing Office, February 1997.
3. CICA, *Competition in Contracting Act of 1984, Public Law 98-369, Report of the Committee on Government Affairs, United States Senate*, March 31, 1984, U.S. Government Printing Office.
4. Hearn, E. E., *Federal Acquisition and Contract Management*, Hearn Associates, 1996.
5. Yoder, E., *Commercial Style Market Research for Navy Activities*, Master's Thesis, Naval Postgraduate School, December 1993.
6. Federal Acquisition Streamlining Act, Public Law 103-355, Washington, D.C., 1994.
7. General Accounting Office, *The Government's Market Research Efforts*, LTR Report GAO/NSIAD-97-3, U.S. Government Printing Office, October 1996.
8. *Federal Acquisition Regulation (FAR)*, U.S. Government Printing Office.
9. General Services Administration, *Introduction to Contracting and the Federal Acquisition Process*, October 1992.
10. *Defense Acquisition Deskbook*, Office of the Under Secretary of Defense (Acquisition and Technology) and (Acquisition Reform), September 1996.
11. *Defense Federal Acquisition Regulation Supplement (DFARS)*, U.S. Government Printing Office.
12. Polowczyk, John P., *Market Research and Major Weapon Systems Acquisition*, Naval Postgraduate School, Research Paper, September 1996.
13. Cundiff, Edward W. And Sill, Richard R., *Basic Marketing: Concepts, Decisions and Strategies*, Prentice Hall, Inc., Englewood Cliffs, New Jersey, 1971.
14. Render, Barry and Stair, Ralph M. Jr., *Quantitative Analysis for Management*, Prentice Hall, Inc., 1997.

15. Fearon, Harold, *Purchasing Research in American Business*, PhD Thesis, Michigan State University, 1961.
16. Federal Acquisition Institute, *Procurement Planning*, Office of Acquisition Policy, General Services Administration, August 1997.
17. Mulhern, J. J., *Market Research for Federal Contracting Officers: Key to Procurement Reform*, National Association of Purchasing Management, Inc., 1991
18. Polowczyk, John P., *Market Research in the United States Navy: A Study of the Skills and Tools Required to Conduct Market Research*, Master's Thesis, Naval Postgraduate School, December 1996.
19. Fearon, Harold, National Association of Purchasing Managers (NAPM), Phone Interview, 18 September 1997.
20. Mulhern, J. J., National Association of Purchasing Management (NAPM), Phone Interview, 17 September, 1997.
21. Kaplan, Robert S., and Norton, David P., *The Balanced Scorecard - Measures That Drive Performance*, Harvard Business Review, January - February 1992.
22. Booher, Jack W., Pinker, Aron, and Smith, Charles G., *Selecting Effective Acquisition Process Metrics*, Acquisition Reform Quarterly, Spring 1997.
23. *Market Research Information Guide*, Office of the Deputy Under Secretary of Defense (Acquisition Reform), October 1997.
24. Nash, Ralph C. Jr., "Training the Contracting Officer of the Future", *Contract Management*, March 1997, pp.14-17.
25. *Contract Pricing Reference Guide, Volume I, Price Analysis*, Air Force Institute of Technology and Federal Acquisition Institute, October, 1996.
26. Porter, M., *Competitive Advantage*, New York: Free Press, 1985.
27. McMillian, I., *Strategy Formulation*, St. Paul, MN, West Publishing Co., 1976.
28. Decision Focus Consulting, *Developing Organizational Vision*, 1992.

BIBLIOGRAPHY

- Barlow, C. Wayne, *Purchasing for the Newly Appointed Buyer*, American Management Association, Inc., 1970.
- Cantor, Jerry, *Evaluating Purchasing Systems*, American Management Association, Inc., 1970.
- Cibinic, John Jr. and Nash, Ralph C., *Competitive Negotiation: The Source Selection Process*, The George Washington University, Washington, DC., 1993.
- Dobler, Donald and Burt, David, *Purchasing and Materials Management*, McGraw Hill Purchasing Company, 1996.
- Dowst, Somerby R., *Basics for Buyers: A Practical Guide to Better Purchasing*, Cahners Publishing Company, 1971.
- England, Wilbur B., Fearon, Herald E., and Leenders, Michael R., *Purchasing and Materials Management*, Richard D. Irwin, Inc. 1985.a
- Hodges, H. G., *Procurement: The Modern Science of Purchasing*, Harpers and Brothers Publishing, 1961.
- SD-2, Buying Commercial and Nondevelopmental Items: A Handbook*, Office of the Under Secretary of Defense (Acquisition and Technology), U.S. Government Printing Office, April 1996.
- SD-5, Market Analysis for Nondevelopmental Items*, Office of the Assistant Secretary of Defense (Production and Logistics), U.S. Government Printing Office, February 1992.

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